

## Unofficial Translation

### Notification of Ministry of Public Health (No.389) B.E. 2561 (2018) Re: Food Additives (No.5)

Whereas it is expedient to amend the Notification of Ministry of Public Health on Food Additives to suit the current situation and to increase the efficiency of consumer protection.

By virtue of the first paragraph of Section 5, and Section 6 (1)(2)(4)(5)(6)(7)(9) and (10) issued under the Food Act, B.E. 2522 (1979), thus, the Minister of Public Health prescribes the Notification as follows:

Clause 1 The annex I and annex II of the Notification of the Ministry of Public Health No. 381 B.E. 2559 (2016), Re: Food Additives (No.4), dated 3<sup>rd</sup> November B.E. 2559 (2016), shall be repealed and replaced with the annex I and annex II of this Notification.

Clause 2 Clause 5 of the Notification of the Ministry of Public Health No. 381 B.E. 2559 (2016), Re: Food Additives (No.4), dated 3<sup>rd</sup> November B.E. 2559 (2016)

Clause 3 Manufacturers or Importers of Foods, which food additive contained in such food has been approved prior to this Notification comes into force and the food additive is different from the annex of this notification, shall comply with this Notification, as the case may be, as follows:

(1) The food product that used food additives which the provisions is adopted in B.E. 2559 (2016) according to the annex I of this Notification shall comply with this Notification within 2 years as from the date of the Notification of the Ministry of Public Health No. 381 B.E. 2559 (2016), Re: Food Additives (No.4), dated 3<sup>rd</sup> November B.E. 2559 (2016) comes into force.

(2) The food product that used food additives which the provisions is adopted in B.E. 2561 (2018) according to the annex I of this Notification shall comply with this Notification within 2 years as from the date of this Notification comes into force.

Clause 4 This notification shall come into force as from the day following date of its publication in the Government Gazette.

Note: This English version of the notification is translated to meet the need of the non-Thai speaking people. In case of any discrepancy between the Thai original and the English translation, the former will take priority.

## Annex I

Attachment to the Notification of the Ministry of Public Health (No. 389) B.E 2561 (2018)

Re: Food Additives (No.5)

ACESULFAME POTASSIUM (แอสซัลเฟมโพแทสเซียม)				
INS: 950	Synonym: Acesulfame K	Functional Class: Flavour enhancer, Sweetener		
FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	350	188,TH1	2559
01.3.2	Beverage whiteners	2000	188	2559
01.4.4	Cream analogues	1000	188	2559
01.5.2	Milk and cream powder analogues	1000	188	2559
01.6.5	Cheese analogues	350	188	2559
01.7	Dairy-based desserts	350	188	2559
02.3	Fat emulsions mainly of type oil-in-water	1000	188	2559
02.4	Fat-based desserts	350	188	2559
03.0	Edible ices	800	188	2559
04.1.2.1	Frozen fruit	500	188	2559
04.1.2.2	Dried fruit	500	188	2559
04.1.2.3	Fruit in vinegar, oil, or brine	200	188	2559
04.1.2.4	Canned or bottled fruit	350	188	2559
04.1.2.6	Fruit-based spreads for spread or raw materials	1000	188	2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	500	188	2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	350	188	2559
04.1.2.9	Fruit-based desserts	350	188	2559
04.1.2.10	Fermented fruit products	350	188	2559
04.1.2.11	Fruit fillings	350	188	2559
04.1.2.12	Cooked fruit	500	188	2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	200	144,188	2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	350	188	2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	1000	188	2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	350	188	2559
04.2.2.7	Fermented vegetable and seaweed products	1000	188	2559

## ACESULFAME POTASSIUM (แอสซึลเฟมโปแทสเซียม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.1.1	Cocoa mixes (powders), cocoa mass and cocoa cake	350	97,188,XS141	2559
05.1.2	Cocoa mixes (syrops)	350	97,188	2559
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	1000	188,XS86	2559
05.1.4	Cocoa and chocolate products	500	188,TH2	2559
05.1.5	Imitation chocolate, chocolate substitute products	500	188	2559
05.2.1	Hard candy	500	156,188	2559
05.2.2	Soft candy and other desserts, excluding products of food categories 01.7, 02.4, 04.1.2.9 and 06.5	1000	157,188,XS309R	2561
05.2.3	Nougats and marzipans	1000	188	2559
05.3	Chewing gum	5000	188	2559
05.4	Decorations, toppings and sweet sauces	500	188	2559
06.3	Breakfast cereals	1200	188	2559
06.5	Cereal and starch based desserts	350	188	2559
07.1	Bread and ordinary bakery wares and mixes	1000	188	2559
07.2	Fine bakery wares and mixes	1000	165,188	2559
09.2	Processed fish and fish products	200	144,188,XS36, XS92,XS95, XS165,XS166, XS190,XS191, XS292,XS311, XS312,XS315	2561
09.3	Semi-preserved fish and fish products	200	144,188	2559
09.4	Fully preserved, including canned fish and fish products	200	144,188	2559
10.4	Egg-based desserts	350	188	2559
11.4	Other sugars and syrups	1000	159,188	2559
11.6	Table-top sweeteners directly sold to consumers	GMP	188	2559
12.2	Herbs, spices, seasonings, and condiments	2000	188	2559
12.3	Vinegars	2000	188	2559
12.4	Mustards	350	188	2559
12.5	Soups and broths	110	188,XS117	2559

## ACESULFAME POTASSIUM (แอสซูลเฟมโปแทสเซียม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.6	Sauces and like products	1000	188	2559
12.7	Salads and sandwich spreads	350	188	2559
13.3	Dietetic foods intended for special medical purposes	500	188	2559
13.4	Dietetic formulae for slimming purposes and weight reduction	450	188	2559
13.5	Dietetic foods	450	188	2559
13.6	Food supplements	2000	188	2559
14.1.3.1	Fruit nectar	350	188	2559
14.1.3.2	Vegetable nectar	350	188	2559
14.1.3.3	Concentrates for fruit nectar	350	127,188	2559
14.1.3.4	Concentrates for vegetable nectar	350	127,188	2559
14.1.4	Water-based flavoured drinks	425	127,188,TH3	2561
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	600	127,160,188	2559
14.2.7	Aromatized alcoholic beverages	350	188	2559
15.0	Ready-to-eat savouries	350	188	2559

## ACETIC ACID, GLACIAL (กรดแอสติก)

INS: 260      Synonym: Acetic acid; Ethanoic acid      Functional Class: Acidity regulator, Preservative

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.6.6	Whey cheese	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559

## ACETIC ACID, GLACIAL (กรดแอสซิติค)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.1.1	Untreated fresh vegetables, seaweeds, nuts and seeds	GMP	262,263	2559
04.2.2.1	Frozen vegetables, seaweeds, nuts and seeds	GMP	262,263	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41,XS166	2561

## ACETIC ACID, GLACIAL (กรดแอสซิติค)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4	Cooked and/or fried fish and fish products	GMP		2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	266,267	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	5000	238	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559

## ACETIC ACID, GLACIAL (กรดแอซีติก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## ACETIC AND FATTY ACID ESTERS OF GLYCEROL (เอสเทอร์ของกลีเซอรอลของกรดแอซีติกและกรดไขมัน)

INS: 472a      Synonym: Acetic acid esters of mono- and diglycerides; Acetoglycerides; Acetylated mono- and diglycerides      Functional Class: Emulsifier, Sequestrant, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559

## ACETIC AND FATTY ACID ESTERS OF GLYCEROL (เอสเทอร์ของกลีเซอรอลของกรดแอสีติกและกรดไขมัน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559



## ACETIC AND FATTY ACID ESTERS OF GLYCEROL (เอสเทอร์ของกลีเซอรอลของกรดแอสिटิกและกรดไขมัน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	XS36, XS92, XS95, XS165, XS190, XS191, XS292, XS312, XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	16, XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559

## ACETIC AND FATTY ACID ESTERS OF GLYCEROL (เอสเทอร์ของกลีเซอรอลของกรดแอสติกและกรดไขมัน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.2	Complementary foods for infants and young children	5000	239,268	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## ACETYLATED DISTARCH ADIPATE (แอสซิไทเลเตดไดสตาร์ชอะดิเพต)

INS: 1422      Synonym: -      Functional Class: Emulsifier, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559

## ACETYLATED DISTARCH ADIPATE (แอสีทีเลเทดไดสตาร์ชอะดิเพต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559

## ACETYLATED DISTARCH ADIPATE (แอซีทิลเลเทดไดสตาร์ชอะดิเพต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	63	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.2	Follow-up formulae	5000	72,150,285,292	2559
13.2	Complementary foods for infants and young children	50000	269,270	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559

## ACETYLATED DISTARCH ADIPATE (แอสีทีเลเทตไดสตาร์ชอะดิเพต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## ACETYLATED DISTARCH PHOSPHATE (แอสีทีเลเทตไดสตาร์ชฟอสเฟต)

INS: 1414      Synonym: -      Functional Class: Emulsifier, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559

## ACETYLATED DISTARCH PHOSPHATE (แอสีทีเลเทดไดสตาร์ชฟอสเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559

## ACETYLATED DISTARCH PHOSPHATE (แอสซีทิลเลเทดไดสตาร์ชฟอสเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	XS36, XS92, XS95, XS165, XS190, XS191, XS292, XS312, XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	63	2559
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559

## ACETYLATED DISTARCH PHOSPHATE (แอสีทีเลเทตไดสตาร์ชฟอสเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	5000	72,150,284,292	2559
13.1.2	Follow-up formulae	5000	72,150,285,292	2559
13.1.3	Formulae for special medical purposes for infants	5000	72,150,292	2559
13.2	Complementary foods for infants and young children	50000	269,270	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## ACETYLATED OXIDIZED STARCH (แอสีทีเลเทตออกซิไดซ์ดีสตาร์ช)

INS: 1451      Synonym: -      Functional Class: Emulsifier, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559



## ACETYLATED OXIDIZED STARCH (แอซีทิลเลเทตออกซิไดซ์ดีสตาร์ช)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559

## ACETYLATED OXIDIZED STARCH (แอซีทิลเลเทตออกซิไดซ์ดีสตาร์ช)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	50000	239,269	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559

## ACETYLATED OXIDIZED STARCH (แอซีทิลเลเทดออกซิไดซ์ด์สตาร์ช)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## ACID-TREATED STARCH (แอซิดทรีเทดสตาร์ช)

INS: 1401      Synonym: -      Functional Class: Emulsifier, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP	236	2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559

## ACID TREATED STARCH (แอซิดทรีเทดสตาร์ช)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	63	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559

## ACID TREATED STARCH (แอซิดทรีเทดสตาร์ช)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## ADIPATES (กลุ่มอะดิเพต)

INS: 355      Adipic acid (กรดอะดิก)      Functional Class: Acidity regulator  
Synonym: -

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	1500	1	2559

**AGAR (อะการ์)**

INS: 406	Synonym: Agar-agar; Gelose; Japan agar; Bengal Isinglass; Ceylon Isinglass; Chinese Isinglass; Japanese Isinglass; Layor Carang	Functional Class: Bulking agent, Carrier, Emulsifier, Gelling agent, Glazing agent, Humectant, Stabilizer, Thickener
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559

## AGAR (อาหาร)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	3,53,XS36, XS92,XS95, XS165,XS190, XS191,XS292, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	XS166	2561

## AGAR (อะการ์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41,325	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559



## AGAR (อะการ์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## ALGINIC ACID (กรดแอสจินิก)

INS: 400

Synonym: -

Functional Class: Bulking agent, Carrier, Emulsifier, Foaming agent, Gelling agent, Glazing agent, Humectant, Sequestrant, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559

## ALGINIC ACID (กรดแอลจิินิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559

## ALGINIC ACID (กรดแอลจิินิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	16,XS36,XS92, XS95,XS165, XS190,XS191, XS292,XS312, XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41,332	2559
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.4.1	Cooked fish and fish products	GMP	325	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	GMP	16	2559
09.2.4.3	Fried fish and fish products	GMP	41,332	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300,332	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559

## ALGINIC ACID (กรดแอลจิินิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## ALITAME (แอลลิแทม)

INS: 956

Synonym: -

Functional Class: Sweetener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	40	TH1	2559
01.7	Dairy-based desserts	100		2559
03.0	Edible ices	100		2559
05.1.2	Cocoa mixes (syrops)	300		2559
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	300	XS86	2559
05.1.4	Cocoa and chocolate products	300	XS87,TH2	2561
05.1.5	Imitation chocolate, chocolate substitute products	300		2559
05.2	Confectionery including candy, nougats and marzipans	300	XS309R	2561
05.3	Chewing gum	300		2559

## ALITAME (แอลิเทียม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.4	Decorations, toppings and sweet sauces	300		2559
11.4	Other sugars and syrups	200	159	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.5	Soups and broths	40	XS117	2559
13.5	Dietetic foods	300		2559
14.1.4	Water-based flavoured drinks	40	127,TH3	2559

## ALKALINE TREATED STARCH (แอลคาไลน์ทรีเทตสตาร์ช)

INS: 1402      Synonym: -      Functional Class: Emulsifier, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559

## ALKALINE TREATED STARCH (แอลคาไลน์ที่เทตสตาร์ช)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	63	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559

## ALKALINE TREATED STARCH (แอลคาไลน์ที่เทตสตาร์ช)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## ALLURA RED AC (แอลลูลูรา เรด เอซี)

INS: 129      Synonym: CI Food Red 17; FD&C Red      Functional Class: Colour  
No.40; CI (1975) No.16035

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	70	52	2559
01.6.2.2	Rind of ripened cheese	100		2559

## ALLURA RED AC (แอลลुरา เรด เอซี)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.4	Processed cheese	100		2559
01.6.5	Cheese analogues	100	3	2559
01.7	Dairy-based desserts	300		2559
02.4	Fat-based desserts	300		2559
03.0	Edible ices	150		2559
04.1.2.5	Jams, jellies and marmalades	100		2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	300		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	300	182	2559
04.1.2.9	Fruit-based desserts	300		2559
04.1.2.11	Fruit fillings	300		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	300		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	200		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	200	92	2559
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	300	XS86	2559
05.1.4	Cocoa and chocolate products	300	183	2559
05.1.5	Imitation chocolate, chocolate substitute products	300		2559
05.2	Confectionery including candy, nougats and marzipans	300	XS309R	2561
05.3	Chewing gum	300		2559
05.4	Decorations, toppings and sweet sauces	300		2559
06.3	Breakfast cereals	300		2559
06.5	Cereal and starch based desserts	300		2559
07.1.2	Crackers, excluding sweet crackers	300		2559
07.1.3	Other ordinary bakery products	300		2559
07.2	Fine bakery wares and mixes	300		2559
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	25	XS88, XS89, XS98	2559
08.4	Edible casings	300	16	2559



## ALLURA RED AC (แอลลुरา เรด เอซี)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.1	Frozen fish, fish fillets, and fish products	300	95,XS36, XS92,XS95, XS165,XS190, XS191,XS292, XS312,XS315	2561
09.2.4.1	Cooked fish and fish products	300	95	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	250		2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	300	382	2561
09.3.3	Caviar and other fish roe products	300		2559
09.3.4	Semi-preserved fish and fish products, excluding products of food categories 09.3.1 - 09.3.3	300		2559
10.1	Fresh eggs	100	4	2559
10.4	Egg-based desserts	300		2559
11.4	Other sugars and syrups	300		2559
12.2.2	Seasonings and condiments	300		2559
12.4	Mustards	300		2559
12.5	Soups and broths	300	337	2559
12.6	Sauces and like products	300		2559
13.3	Dietetic foods intended for special medical purposes	50		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	50		2559
13.5	Dietetic foods	300		2559
13.6	Food supplements	300		2559
14.1.4	Water-based flavoured drinks	300	127	2559
14.2.2	Cider and perry	200		2559
14.2.4	Wines other than grape	200		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	300		2559
14.2.7	Aromatized alcoholic beverages	200		2559
15.1	Snacks - potato, cereal, flour or starch based	200		2559
15.2	Snacks - Processed nut or flavoured processed seed based	100		2559

**ALPHA AMYLASE FROM *ASPERGILLUS ORYZAE* VAR. (เอนไซม์แอลฟา-แอมิเลสจากเชื้อแอสเพอร์จิลลัส โอไรเซ)**

INS: 1100(i)    Synonym: -

Functional Class: Flour treatment agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.2	Flours and starches	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559

ALPHA AMYLASE FROM *ASPERGILLUS ORYZAE* VAR. (เอนไซม์แอลฟา-แอมิเลสจากเชื้อแอสเพอร์จิลลัส โอไรเซ)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559

ALPHA AMYLASE FROM *ASPERGILLUS ORYZAE* VAR. (เอนไซม์แอลฟา-แอมิเลสจากเชื้อแอสเพอร์จิลลัส โอไรเซ)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

ALPHA AMYLASE FROM *BACILLUS MEGATERIUM* EXPRESSED IN *BACILLUS SUBTILIS*

(เอนไซม์แอลฟา-แอมิเลสจากเชื้อบาซิลลัส เมกกาทีเรียม ที่แสดงออกในเชื้อบาซิลลัส ซับทีลิส)

INS: 1100(iv)    Synonym: -    Functional Class: Flour treatment agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559

ALPHA AMYLASE FROM *BACILLUS MEGATERIUM* EXPRESSED IN *BACILLUS SUBTILIS*

(เอนไซม์แอลฟา-เอมิเลสจากเชื้อบациลลัส เมกกาทีเรียม ที่แสดงออกในเชื้อบациลลัส ซับทีลิส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulpes and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559

ALPHA AMYLASE FROM *BACILLUS MEGATERIUM* EXPRESSED IN *BACILLUS SUBTILIS*

(เอนไซม์แอลฟา-แอมิเลสจากเชื้อบациลลัส เมกกาทีเรียม ที่แสดงออกในเชื้อบациลลัส ซับทีลิส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

ALPHA AMYLASE FROM *BACILLUS STEAROTHERMOPHILUS*

(เอนไซม์แอลฟา-แอมิเลสจากเชื้อบациลลัส สตีโรเทอร์มอฟิลัส)

INS: 1100(ii) Synonym: - Functional Class: Flour treatment agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559

ALPHA AMYLASE FROM *BACILLUS STEAROTHERMOPHILUS*

(เอนไซม์แอลฟา-แอมิเลสจากเชื้อบาคซิลลัส สตีโรเทอร์มอฟิลัส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559

ALPHA AMYLASE FROM *BACILLUS STEAROTHERMOPHILUS*

(เอนไซม์แอลฟา-แอมิเลสจากเชื้อบациลลัส สตีโรเทอร์มอฟิลัส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559



ALPHA AMYLASE FROM *BACILLUS STEAROTHERMOPHILUS* EXPRESSED IN *BACILLUS SUBTILIS*

(เอนไซม์แอลฟา-แอมิเลสจากเชื้อบาคิลลัส สตีโรเทอร์มอฟิลัสที่แสดงออกในเชื้อบาคิลลัส ซับทิลิส)

INS: 1100(v) Synonym: -

Functional Class: Flour treatment agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559

ALPHA AMYLASE FROM *BACILLUS STEAROTHERMOPHILUS* EXPRESSED IN *BACILLUS SUBTILIS*

(เอนไซม์แอลฟา-แอมิเลสจากเชื้อบациลลัส สตีโรเทอร์มอฟิลัสที่แสดงออกในเชื้อบациลลัส ซับทิลิส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559

ALPHA AMYLASE FROM *BACILLUS STEAROTHERMOPHILUS* EXPRESSED IN *BACILLUS SUBTILIS*

(เอนไซม์แอลฟา-แอมิเลสจากเชื้อบациลลัส สตีโรเทอร์มอฟิลัสที่แสดงออกในเชื้อบациลลัส ซับทิลิส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

ALPHA-AMYLASE FROM *BACILLUS SUBTILIS* (เอนไซม์แอลฟา-แอมิเลสจากเชื้อบациลลัส ซับทิลิส)

INS: 1100(iii)    Synonym: Glycogenase    Functional Class: Flour treatment agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559

ALPHA-AMYLASE FROM *BACILLUS SUBTILIS* (เอนไซม์แอลฟา-แอมิเลสจากเชื้อบาคิลลัส ซับทีลิส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.2	Flours and starches	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559

ALPHA-AMYLASE FROM *BACILLUS SUBTILIS* (เอนไซม์แอลฟา-แอมิเลสจากเชื้อบาคิลลัส ซับทีลิส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## ALUMINIUM AMMONIUM SULFATE (อะลูมิเนียมแอมโมเนียมซัลเฟต)

INS: 523      Synonym: Ammonium alum      Functional Class: Acidity regulator, Colour retention agent, Firming agent, Raising agent, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	520	6,245,296,XS66	2561
06.4.1	Fresh pastas and noodles and like products	300	6,247	2559
07.1.2	Crackers, excluding sweet crackers	100	6,246	2559
07.1.3	Other ordinary bakery products	100	6,244,246	2559
07.1.5	Steamed breads and buns	40	6,246,248	2559
07.1.6	Mixes for bread and ordinary bakery wares products of food categories 07.1.1-07.1.5	40	6,246,249	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	200	6,250	2559

**AMMONIUM ALGINATE (แอมโมเนียมแอลจิเนต)**

INS: 403      Synonym: Ammonium salt of alginic acid      Functional Class: Bulking agent, Carrier, Emulsifier, Foaming agent, Gelling agent, Glazing agent, Humectant, Sequestrant, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559

## AMMONIUM ALGINATE (แอมโมเนียมแอลจีเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	XS36,XS92, XS95,XS165, XS190,XS191, XS292,XS312, XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	63	2561
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559

## AMMONIUM ALGINATE (แอมโมเนียมแอลจีเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## AMMONIUM CARBONATE (แอมโมเนียมคาร์บอเนต)

INS: 503(i)

Synonym: -

Functional Class: Acidity regulator, Raising agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559



## AMMONIUM CARBONATE (แอมโมเนียมคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559

## AMMONIUM CARBONATE (แอมโมเนียมคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	GMP	239,248	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559

## AMMONIUM CARBONATE (แอมโมเนียมคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## AMMONIUM CHLORIDE (แอมโมเนียมคลอไรด์)

INS: 510      Synonym: -      Functional Class: Flour treatment agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559

## AMMONIUM CHLORIDE (แอมโมเนียมคลอไรด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559

## AMMONIUM CHLORIDE (แอมโมเนียมคลอไรด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## AMMONIUM HYDROGEN CARBONATE (แอมโมเนียมไฮโดรเจนคาร์บอเนต)

INS: 503(ii)    Synonym: Ammonium bicarbonate    Functional Class: Acidity regulator, Raising agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559

## AMMONIUM HYDROGEN CARBONATE (แอมโมเนียมไฮโดรเจนคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	63	2561
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559

## AMMONIUM HYDROGEN CARBONATE (แอมโมเนียมไฮโดรเจนคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	GMP	239,248	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**AMMONIUM HYDROXIDE (แอมโมเนียมไฮดรอกไซด์)**

INS: 527      Synonym: Ammonia solution; Strong ammonia solution; Aqueous ammonia      Functional Class: Acidity regulator

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559



## AMMONIUM HYDROXIDE (แอมโมเนียมไฮดรอกไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559

**AMMONIUM HYDROXIDE (แอมโมเนียมไฮดรอกไซด์)**

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**AMMONIUM SALTS OF PHOSPHATIDIC ACID (เกลือแอมโมเนียมของกรดฟอสฟาติก)**

INS: 442      Synonym: Ammonium phosphatides;      Functional Class: Emulsifier  
 Emulsifier YN; Mixed  
 ammonium salts of  
 phosphorylated glycerides

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.7	Dairy-based desserts	5000	231	2559
05.1.1	Cocoa mixes (powders), cocoa mass and cocoa cake	10000	97	2559
05.1.4	Cocoa and chocolate products	10000	101	2559
05.1.5	Imitation chocolate, chocolate substitute products	10000		2559

**ANNATTO EXTRACTS, BIXIN-BASED (สารสกัดเมล็ดคำแสดที่มีบิกซิน)**

INS: 160b(i)      Synonym: Annatto B; Annatto E;  
 Orlean; Terre orellana; L.  
 Orange; CI (1975) 75120  
 (Natural Orange 4)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	20	8,52	2561
01.7	Dairy-based desserts	10	8,TH13	2561
02.2.1	Butter	20	8	2559
03.0	Edible ices	10	8	2561

**ANNATTO EXTRACTS, NORBIXIN-BASED (สารสกัดเมล็ดคําแสดที่มีนอร์บิกซิน)**

INS: 160b(ii)    Synonym: Annatto C; Annatto F;    Functional Class: Colour  
 Annatto G; Orlean; Terre  
 orellana; L. Orange; CI (1975)  
 75120 (Natural Orange 4)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	10	52,185	2561
01.6.1	Unripened cheese	25	185	2561
01.6.2	Ripened cheese	50	185	2561
01.6.4	Processed cheese	50	185	2561
01.6.5	Cheese analogues	50	185	2561
01.7	Dairy-based desserts	10	185,TH13,TH29	2561
03.0	Edible ices	10	185	2561

**ASCORBIC ACID, L- (กรดแอสคอร์บิก)**

INS: 300    Synonym: Vitamin C, L-Ascorbic acid,    Functional Class: Acidity regulator, Antioxidant,  
 Ascorbic acid    Flour treatment agent , Sequestrant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559

## ASCORBIC ACID, L- (กรดแอสคอร์บิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.1.1	Untreated fresh vegetables, seaweeds, nuts and seeds	500	262	2559
04.2.2.1	Frozen vegetables, seaweeds, nuts and seeds	GMP	110	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.2.1	Flours	300		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	200		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559

## ASCORBIC ACID, L- (กรดแอสคอร์บิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.4	Edible casings	GMP		2559
09.1.2	Fresh molluscs, crustaceans, and echinoderms	GMP	390,XS312,XS315	2561
09.2.1	Frozen fish, fish fillets, and fish products	GMP	307,392,XS189, XS190,XS191, XS222,XS236, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	306,307	2559
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4	Cooked and/or fried fish and fish products	GMP		2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	267,333	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.2	Follow-up formulae	50	72,242,315	2559
13.2	Complementary foods for infants and young children	500	242	2559

## ASCORBIC ACID, L- (กรดแอสคอร์บิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.2.1	Fruit juice	GMP		2559
14.1.2.2	Vegetable juice	GMP		2559
14.1.2.3	Concentrates for fruit juice	GMP	127	2559
14.1.2.4	Concentrates for vegetable juice	GMP		2559
14.1.3.1	Fruit nectar	GMP		2559
14.1.3.2	Vegetable nectar	GMP		2559
14.1.3.3	Concentrates for fruit nectar	GMP	127	2559
14.1.3.4	Concentrates for vegetable nectar	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## ASCORBYL ESTERS (กลุ่มแอสคอร์บิลเอสเทอร์)

INS: 304	Ascorbyl palmitate (แอสคอร์บิลแพลมิเตต) Synonym: Vitamin C palmitate; L- ascorbyl palmitate	Functional Class: Antioxidant		
INS: 305	Ascorbyl stearate (แอสคอร์บิลสเตียเรต) Synonym: Vitamin C stearate; L- ascorbyl stearate	Functional Class: Antioxidant		

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.3.2	Beverage whiteners	80	10,15	2559
01.5.1	Milk powder and cream powder (plain)	500	10,15	2559

## ASCORBYL ESTERS (กลุ่มแอสคอร์บิลเอสเทอร์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.5.2	Milk and cream powder analogues	80	10,15	2559
01.6.2.1	Ripened cheese, includes rind	500	10,15,112	2559
01.7	Dairy-based desserts	500	2,10,15	2559
02.1.1	Butter oil, anhydrous milkfat, ghee	500	10,15,171	2559
02.1.2	Vegetable oils and fats	500	10,15	2559
02.1.3	Animal oils and fats	500	10,15	2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	500	10,15	2559
02.3	Fat emulsions mainly of type oil-in-water	500	10,15	2559
02.4	Fat-based desserts	80	10,15	2559
03.0	Edible ices	200	10,15	2559
04.1.2.2	Dried fruit	80	10,15	2559
04.1.2.9	Fruit-based desserts	500	2,10,15	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	80	10,15	2559
05.0	Confectionery	500	10,15,375,XS86, XS105,XS141, XS309R	2561
06.3	Breakfast cereals	200	10,15	2559
06.4.3	Pre-cooked pastas and noodles and like products	500	10,15,211	2559
06.5	Cereal and starch based desserts	500	2,10,15	2559
07.0	Bakery wares	1000	10,15	2559
08.4	Edible casings	5000	10,15	2559
09.2.1	Frozen fish, fish fillets, and fish products	1000	10,15,392,XS36, XS92,XS95, XS190,XS191, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	1000	10,15	2559
10.4	Egg-based desserts	500	2,10,15	2559
11.4	Other sugars and syrups	200	10,15	2559
12.2	Herbs, spices, seasonings, and condiments	500	10,15	2559
12.4	Mustards	500	10,15	2559
12.5	Soups and broths	200	10,15	2559
12.6.1	Emulsified sauces and dips	500	10,15	2559

## ASCORBYL ESTERS (กลุ่มแอสคอร์บิลเอสเทอร์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.6.2	Non-emulsified sauces	500	10,15	2559
12.6.3	Mixes for sauces and gravies	200	10,15	2559
12.6.4	Clear sauces	200	10,15	2559
12.7	Salads and sandwich spreads	200	10,15	2559
13.1.1	Infant formulae	10	15,72,187	2559
13.1.2	Follow-up formulae	50	15,72,187,315	2559
13.1.3	Formulae for special medical purposes for infants	10	10,15,72	2559
13.2	Complementary foods for infants and young children	100	10,15	2559
13.4	Dietetic formulae for slimming purposes and weight reduction	500	10,15	2559
13.5	Dietetic foods	500	10,15	2559
13.6	Food supplements	500	10,15	2559
14.1.4	Water-based flavoured drinks	1000	10,15,127	2559
15.1	Snacks - potato, cereal, flour or starch based	200	10,15	2559
15.2	Snacks - Processed nut or flavoured processed seed based	200	10,15	2559

## ASPARTAME (แอสพาร์เทม)

INS: 951      Synonym: Aspartyl phenylalanine methyl ester (APM)      Functional Class: Flavour enhancer, Sweetener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	350	191,TH1	2559
01.3.2	Beverage whiteners	6000	191	2559
01.4.4	Cream analogues	1000	191	2559
01.5.2	Milk and cream powder analogues	2000	191	2559
01.6.1	Unripened cheese	1000	191	2559
01.6.5	Cheese analogues	1000	191	2559
01.7	Dairy-based desserts	1000	191	2559
02.3	Fat emulsions mainly of type oil-in- water	1000	191	2559
02.4	Fat-based desserts	1000	191	2559
03.0	Edible ices	1000	191	2559
04.1.2.1	Frozen fruit	2000	191	2559
04.1.2.2	Dried fruit	2000	191	2559
04.1.2.3	Fruit in vinegar, oil, or brine	300	144,191	2559



## ASPARTAME (แอสพาร์เทม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.2.4	Canned or bottled fruit	1000	191	2559
04.1.2.6	Fruit-based spreads for spread or raw materials	1000	191	2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	2000	191	2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	1000	191	2559
04.1.2.9	Fruit-based desserts	1000	191	2559
04.1.2.10	Fermented fruit products	1000	191	2559
04.1.2.11	Fruit fillings	1000	191	2559
04.1.2.12	Cooked fruit	1000	191	2559
04.2.2.1	Frozen vegetables, seaweeds, nuts and seeds	1000	191	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	1000	191	2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	300	144,191	2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	1000	191	2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	1000	191	2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	1000	191	2559
04.2.2.7	Fermented vegetable and seaweed products	2500	191	2559
04.2.2.8	Cooked or fried vegetables and seaweeds	1000	191	2559
05.1.1	Cocoa mixes (powders), cocoa mass and cocoa cake	2000	97,191,XS141	2559
05.1.2	Cocoa mixes (syrops)	1000	191	2559
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	3000	191,XS86	2559
05.1.4	Cocoa and chocolate products	3000	37,191,TH2	2561
05.1.5	Imitation chocolate, chocolate substitute products	3000	191	2559
05.2.1	Hard candy	3000	148	2559
05.2.2	Soft candy and other desserts, excluding products of food categories 01.7, 02.4, 04.1.2.9 and 06.5	3000	148,XS309R	2561

## ASPARTAME (แอสพาร์เทม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.2.3	Nougats and marzipans	3000	191	2559
05.3	Chewing gum	10000	191	2559
05.4	Decorations, toppings and sweet sauces	1000	191	2559
06.3	Breakfast cereals	1000	191	2559
06.5	Cereal and starch based desserts	1000	191	2559
07.1	Bread and ordinary bakery wares and mixes	4000	191	2559
07.2	Fine bakery wares and mixes	1700	165,191	2559
09.2	Processed fish and fish products	300	144,191,XS36, XS92,XS95, XS165,XS166, XS190,XS191, XS292,XS311, XS312,XS315	2561
09.3	Semi-preserved fish and fish products	300	144,191	2559
09.4	Fully preserved, including canned fish and fish products	300	144,191	2559
10.4	Egg-based desserts	1000	191	2559
11.4	Other sugars and syrups	3000	159,191	2559
11.6	Table-top sweeteners directly sold to consumers	GMP	191	2559
12.2.2	Seasonings and condiments	2000	191	2559
12.3	Vinegars	3000	191	2559
12.4	Mustards	350	191	2559
12.5	Soups and broths	1200	188,XS117	2559
12.6	Sauces and like products	350	191	2559
12.7	Salads and sandwich spreads	350	166	2559
13.3	Dietetic foods intended for special medical purposes	1000	191	2559
13.4	Dietetic formulae for slimming purposes and weight reduction	800	191	2559
13.5	Dietetic foods	1000	191	2559
13.6	Food supplements	5500	191	2559
14.1.3.1	Fruit nectar	600	191	2559
14.1.3.2	Vegetable nectar	600	191	2559
14.1.3.3	Concentrates for fruit nectar	600	127,191	2559
14.1.3.4	Concentrates for vegetable nectar	600	127	2559
14.1.4	Water-based flavoured drinks	500	127,191,TH3	2559

## ASPARTAME (แอสพาร์เทม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	600	127,160	2559
14.2.7	Aromatized alcoholic beverages	600	191	2559
15.0	Ready-to-eat savouries	500	191	2559

## ASPARTAME-ACESULFAME SALT (เกลือแอสพาร์เทม-แอสซึลเฟม)

INS: 962	Synonym: Aspartame-acesulfame	Functional Class: Sweetener		
FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	350	113,TH1	2559
01.7	Dairy-based desserts	350	113	2559
02.4	Fat-based desserts	350	113	2559
04.1.2.4	Canned or bottled fruit	350	113	2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	350	113	2559
04.1.2.9	Fruit-based desserts	350	113	2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	200	113	2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	350	113	2559
05.1.5	Imitation chocolate, chocolate substitute products	500	113	2559
07.2	Fine bakery wares and mixes	1000	77,113	2559
09.3	Semi-preserved fish and fish products	200	113	2559
09.4	Fully preserved, including canned fish and fish products	200	113	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
13.3	Dietetic foods intended for special medical purposes	500	113	2559
13.4	Dietetic formulae for slimming purposes and weight reduction	450	113	2559
13.5	Dietetic foods	450	113	2559
13.6	Food supplements	2000	113	2559
14.2.7	Aromatized alcoholic beverages	350	113	2559

**AZODICARBONAMIDE (เอโซไดคาร์โบนาไมด์)**

INS: 927a      Synonym: Azobisformamide;      Functional Class: Flour treatment agent  
Azodicarboxylic acid diamide

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.2.1	Flours	45		2559

**AZORUBINE (เอโซรูบีน)**

INS: 122      Synonym: CI Food Red 3, Carmoisine,      Functional Class: Colour  
CI (1975) No. 14720

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	70	52	2559
01.6.1	Unripened cheese	100	3	2559
01.6.2.2	Rind of ripened cheese	100		2559
01.6.4.2	Flavoured processed cheese	100		2559
01.6.5	Cheese analogues	100	3	2559
01.7	Dairy-based desserts	150		2559
02.4	Fat-based desserts	50		2559
03.0	Edible ices	50		2559
04.1.2.4	Canned or bottled fruit	300		2559
04.1.2.5	Jams, jellies and marmalades	100		2559
04.1.2.6	Fruit-based spreads for spread or raw materials	500		2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	200		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	50	182	2559
04.1.2.9	Fruit-based desserts	50		2559
04.1.2.11	Fruit fillings	50		2559
04.2.2.7	Fermented vegetable and seaweed products	500		2559
05.1.4	Cocoa and chocolate products	300	183	2559
05.1.5	Imitation chocolate, chocolate substitute products	50		2559
05.2	Confectionery including candy, nougats and marzipans	300		2559
05.3	Chewing gum	300		2559
05.4	Decorations, toppings and sweet sauces	50		2559

## AZORUBINE (เอโซรูบีน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.5	Cereal and starch based desserts	50		2559
07.2	Fine bakery wares and mixes	50		2559
08.4	Edible casings	500	16	2559
09.2.2	Frozen battered fish, fish fillets and fish products	500	16,95	2559
09.2.3	Frozen minced and creamed fish products	500	16,95	2559
09.2.4.1	Cooked fish and fish products	500	95	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	250		2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	100	22,XS311	2559
09.3.3	Caviar and other fish roe products	500		2559
09.3.4	Semi-preserved fish and fish products, excluding products of food categories 09.3.1 - 09.3.3	100		2559
09.4	Fully preserved, including canned fish and fish products	500		2559
10.1	Fresh eggs	500	4	2559
10.4	Egg-based desserts	50		2559
11.4	Other sugars and syrups	300	159	2559
12.2.2	Seasonings and condiments	500		2559
12.4	Mustards	300		2559
12.5	Soups and broths	50	99	2559
12.6	Sauces and like products	50		2559
12.7	Salads and sandwich spreads	200		2559
13.3	Dietetic foods intended for special medical purposes	50		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	50		2559
13.5	Dietetic foods	300		2559
13.6	Food supplements	300		2559
14.1.4	Water-based flavoured drinks	50	127	2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	200		2559
14.2.7	Aromatized alcoholic beverages	200		2559
15.1	Snacks - potato, cereal, flour or starch based	200		2559
15.2	Snacks - Processed nut or flavoured processed seed based	100		2559

**BEESWAX (ขี้ผึ้ง)**

INS: 901

Synonym: -

Functional Class: Carrier, Emulsifier, Glazing agent,  
Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.1.2	Surface-treated fresh fruit	GMP		2559
04.2.1.2	Surface-treated fresh vegetables, seaweeds, nuts and seeds	GMP	79	2559
05.1.4	Cocoa and chocolate products	GMP	3	2559
05.1.5	Imitation chocolate, chocolate substitute products	GMP	3	2559
05.2	Confectionery including candy, nougats and marzipans	GMP	3,XS309R	2561
05.3	Chewing gum	GMP		2559
05.4	Decorations, toppings and sweet sauces	GMP		2559
07.2	Fine bakery wares and mixes	GMP	3	2559
13.6	Food supplements	GMP	3	2559
14.1.4	Water-based flavoured drinks	200	127,131	2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	108	2559
15.0	Ready-to-eat savouries	GMP	3	2559

**BEET RED (สีแดงหัวบีต)**

INS: 162

Synonym: Beetroot Red

Functional Class: Colour

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559

## BEET RED (สีแดงหัวบีต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559

## BEET RED (สีแดงหัวบีต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559



**BENZOATES (กลุ่มเบนโซเอต)**

INS: 210	Benzoic acid (กรดเบนโซอิก) Synonym: Benzenecarboxylic acid; Phenylcarboxylic acid	Functional Class: Preservative
INS: 211	Sodium benzoate (โซเดียมเบนโซเอต) Synonym: Sodium salt of benzenecarboxylic acid; Sodium salt of phenylcarboxylic acid	Functional Class: Preservative
INS: 212	Potassium benzoate (โพแทสเซียมเบนโซเอต) Synonym: Potassium salt of benzenecarboxylic acid; Potassium salt of phenylcarboxylic acid	Functional Class: Preservative
INS: 213	Calcium benzoate (แคลเซียมเบนโซเอต) Synonym: Monocalcium benzoate; Calcium salt of benzenecarboxylic acid; Calcium salt of phenylcarboxylic acid	Functional Class: Preservative

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.7	Dairy-based desserts	300	13,TH4,TH5	2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	1000	13	2559
02.3	Fat emulsions mainly of type oil-in- water	1000	13	2559
02.4	Fat-based desserts	1000	13,TH4	2559
04.1.2.3	Fruit in vinegar, oil, or brine	1000	13	2559
04.1.2.5	Jams, jellies and marmalades	1000	13	2559
04.1.2.6	Fruit-based spreads for spread or raw materials	1000	13	2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	1000	13	2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	1000	13	2559
04.1.2.9	Fruit-based desserts	1000	13	2559
04.1.2.10	Fermented fruit products	1000	13	2559
04.1.2.11	Fruit fillings	1000	13	2559

## BENZOATES (กลุ่มเบนโซเอต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.2.12	Cooked fruit	500	13	2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	2000	13	2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	1000	13	2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	3000	13	2559
04.2.2.7	Fermented vegetable and seaweed products	1000	13	2559
04.2.2.8	Cooked or fried vegetables and seaweeds	500	13	2559
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	1500	13, XS86	2559
05.1.5	Imitation chocolate, chocolate substitute products	1500	13	2559
05.2	Confectionery including candy, nougats and marzipans	1000	13, XS309R	2561
05.3	Chewing gum	1500	13	2559
05.4	Decorations, toppings and sweet sauces	1500	13	2559
06.4.1.2	Treated fresh pastas and noodles and like products	1000	13	2559
06.4.2.2	Treated dried pastas and noodles and like products	1000	13	2559
06.4.3	Pre-cooked pastas and noodles and like products	1000	13	2559
06.5	Cereal and starch based desserts	1000	13	2559
07.2	Fine bakery wares and mixes	500	13	2559
08.2.1.2	Cured (including salted) and dried non- heat treated processed meat, poultry, and game products in whole pieces or cuts	1000	3,13	2559
08.3.1.2	Cured (including salted) and dried non- heat treated processed comminuted meat, poultry, and game products	1000	3,13	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	1000	13,82	2559
09.3	Semi-preserved fish and fish products	2000	13,120	2559
10.2.1	Liquid egg products	2500	13	2559

## BENZOATES (กลุ่มเบนโซเอต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
10.4	Egg-based desserts	500	13	2559
11.4	Other sugars and syrups	1000	13	2559
11.6	Table-top sweeteners directly sold to consumers	2000	13	2559
12.2.2	Seasonings and condiments	500	13	2559
12.4	Mustards	1000	13	2559
12.5	Soups and broths	500	13,338,339, TH6	2559
12.6	Sauces and like products	1000	13	2559
12.7	Salads and sandwich spreads	1500	13	2559
13.3	Dietetic foods intended for special medical purposes	1500	13	2559
13.4	Dietetic formulae for slimming purposes and weight reduction	1500	13	2559
13.5	Dietetic foods	1000	13	2559
13.6	Food supplements	2000	13	2559
14.1.2.1	Fruit juice	200	13,91,122	2559
14.1.2.3	Concentrates for fruit juice	200	13,91, 122,127	2559
14.1.3.1	Fruit nectar	200	13,91,122	2559
14.1.3.3	Concentrates for fruit nectar	200	13,91, 122,127	2559
14.1.3.4	Concentrates for vegetable nectar	200	13	2559
14.1.4	Water-based flavoured drinks	200	13,127,301	2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	200	13,127	2559
14.2.2	Cider and perry	1000	13,124	2559
14.2.4	Wines other than grape	1000	13	2559
14.2.5	Mead	1000	13	2559
14.2.7	Aromatized alcoholic beverages	1000	13	2559

## BENZOYL PEROXIDE (เบนโซอิลเพอร์ออกไซด์)

INS: 928      Synonym: Benzoyl superoxide;  
Dibenzoyl peroxide      Functional Class: Bleaching agent, Flour  
treatment agent, Preservative

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.8.1	Liquid whey and whey products	100	74	2559
01.8.2	Dried whey and whey products	100	147	2559
06.2.1	Flours	75		2559

**BLEACHED STARCH (ปลีเซตสตาร์ช)**

INS: 1403

Synonym: -

Functional Class: Emulsifier, Stabilizer,  
Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP	236	2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559

## BLEACHED STARCH (ปลีเซตสตาร์ช)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559

## BLEACHED STARCH (บลีเชดสตาร์ช)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## BRILLIANT BLUE FCF (บริลเลียนต์ บลู เอฟซีเอฟ)

INS: 133      Synonym: CI Food Blue 2; FD&C Blue No.1; CI (1975) No. 42900      Functional Class: Colour

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	150	52	2559
01.6.2.2	Rind of ripened cheese	100		2559
01.6.5	Cheese analogues	100	3	2559
01.7	Dairy-based desserts	150		2559
02.3	Fat emulsions mainly of type oil-in-water	100		2559
02.4	Fat-based desserts	150		2559
03.0	Edible ices	150		2559
04.1.2.4	Canned or bottled fruit	200		2559
04.1.2.5	Jams, jellies and marmalades	100		2559
04.1.2.6	Fruit-based spreads for spread or raw materials	100		2559

## BRILLIANT BLUE FCF (บริลเลียนต์ บลู เอฟซีเอฟ)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	100		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	100	182	2559
04.1.2.9	Fruit-based desserts	150		2559
04.1.2.11	Fruit fillings	250		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	500		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	200		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	100	92	2559
04.2.2.7	Fermented vegetable and seaweed products	100	92	2559
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	100	XS86	2559
05.1.4	Cocoa and chocolate products	100	183	2559
05.1.5	Imitation chocolate, chocolate substitute products	100		2559
05.2	Confectionery including candy, nougats and marzipans	300	XS309R	2561
05.3	Chewing gum	300		2559
05.4	Decorations, toppings and sweet sauces	500		2559
06.3	Breakfast cereals	200		2559
06.5	Cereal and starch based desserts	150		2559
07.1	Bread and ordinary bakery wares and mixes	100		2559
07.2	Fine bakery wares and mixes	200		2559
08.0	Meat and meat products	100	4,16,XS88,XS89, XS96,XS97,XS98	2559
09.1.1	Fresh fish	300	4,16,50	2559
09.1.2	Fresh molluscs, crustaceans, and echinoderms	500	4,16,XS292, XS312,XS315	2561
09.2.1	Frozen fish, fish fillets, and fish products	500	95,XS36, XS92,XS95, XS165,XS190, XS191,XS292, XS312,XS315	2561

## BRILLIANT BLUE FCF (บริลเลียนต์ บลู เอฟซีเอฟ)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.2	Frozen battered fish, fish fillets and fish products	500	16,XS166	2561
09.2.3	Frozen minced and creamed fish products	500	16	2559
09.2.4.1	Cooked fish and fish products	100	95	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	100		2559
09.2.4.3	Fried fish and fish products	500	16	2559
09.3.1	Fish and fish products marinated in vinegar or wine	500	16	2559
09.3.2	Pickled fish and fish products	500	16	2559
09.3.3	Caviar and other fish roe products	500		2559
09.4	Fully preserved, including canned fish and fish products	500		2559
10.1	Fresh eggs	GMP	4	2559
10.4	Egg-based desserts	150		2559
12.2.2	Seasonings and condiments	100		2559
12.4	Mustards	100		2559
12.5	Soups and broths	50		2559
12.6	Sauces and like products	100		2559
13.3	Dietetic foods intended for special medical purposes	50		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	50		2559
13.5	Dietetic foods	300		2559
13.6	Food supplements	300		2559
14.1.4	Water-based flavoured drinks	100	127	2559
14.2.2	Cider and perry	200		2559
14.2.4	Wines other than grape	200		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	200		2559
14.2.7	Aromatized alcoholic beverages	200		2559
15.1	Snacks - potato, cereal, flour or starch based	200		2559
15.2	Snacks - Processed nut or flavoured processed seed based	100		2559



**BROMELAIN (เอนไซม์โบรมีเลน)**

INS: 1101(iii) Synonym: -

Functional Class: Flavour enhancer, Flour  
treatment agent, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559

## BROMELAIN (เอนไซม์โบรมีเลน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559

## BROMELAIN (เอนไซม์โบรมีเลน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## BUTYLATED HYDROXYANISOLE (บิวทิลเฮกซไฮดรอกซีแอนนิโซล)

INS: 320      Synonym: BHA      Functional Class: Antioxidant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.3.2	Beverage whiteners	100	15,195	2559
01.5.1	Milk powder and cream powder (plain)	100	15,196	2559
02.1.1	Butter oil, anhydrous milkfat, ghee	175	15,133,171	2559
02.1.2	Vegetable oils and fats	200	15,130	2559
02.1.3	Animal oils and fats	200	15,130	2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	200	15,130	2559
02.3	Fat emulsions mainly of type oil-in- water	200	15,130	2559
02.4	Fat-based desserts	200	15,130	2559
03.0	Edible ices	200	15,195	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	200	15,76,196	2559
05.1.4	Cocoa and chocolate products	200	15,130,303	2561
05.2	Confectionery including candy, nougats and marzipans	200	15,130,XS309R	2561
05.3	Chewing gum	400	130	2559
05.4	Decorations, toppings and sweet sauces	200	15,130	2559
06.3	Breakfast cereals	200	15,196	2559
06.4.3	Pre-cooked pastas and noodles and like products	200	15,130	2559

## BUTYLATED HYDROXYANISOLE (บิวทิลเฮกซไฮดรอกซีแอนนิโซล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
07.0	Bakery wares	200	15,180	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	200	15,130, XS96,XS97	2559
08.3	Processed comminuted meat, poultry, and game products	200	15,130,XS88, XS89,XS98	2559
09.2.1	Frozen fish, fish fillets, and fish products	200	15,180,392, XS36,XS92, XS95,XS165, XS190,XS191, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	200	15,180,XS166	2561
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	200	15,196,XS311	2559
09.3	Semi-preserved fish and fish products	200	15,180	2559
09.4	Fully preserved, including canned fish and fish products	200	15,180	2559
12.2	Herbs, spices, seasonings, and condiments	200	15,130	2559
12.5	Soups and broths	200	15,130	2559
12.6	Sauces and like products	200	15,130	2559
12.8	Yeast and like products	200	15	2559
13.6	Food supplements	400	15,196	2559
15.1	Snacks - potato, cereal, flour or starch based	200	15,130	2559
15.2	Snacks - Processed nut or flavoured processed seed based	200	15,130	2559

## BUTYLATED HYDROXYTOLUENE (บิวทิลเฮกซไฮดรอกซีโทลูอีน)

INS: 321

Synonym: BHT

Functional Class: Antioxidant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.3.2	Beverage whiteners	100	15,195	2559
01.5.1	Milk powder and cream powder (plain)	200	15,196	2559
02.1.1	Butter oil, anhydrous milkfat, ghee	75	15,133,171	2559
02.1.2	Vegetable oils and fats	200	15,130	2559
02.1.3	Animal oils and fats	200	15,130	2559

## BUTYLATED HYDROXYTOLUENE (บิวทิลไฮดรอกซีโทลูอีน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	200	15,130	2559
02.3	Fat emulsions mainly of type oil-in-water	200	15,130	2559
02.4	Fat-based desserts	200	15,130	2559
03.0	Edible ices	100	15,195	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	200	15,76,196	2559
05.1.4	Cocoa and chocolate products	200	15,130,303	2561
05.1.5	Imitation chocolate, chocolate substitute products	200	15,197	2559
05.2	Confectionery including candy, nougats and marzipans	200	15,130,XS309R	2561
05.3	Chewing gum	400	130	2559
05.4	Decorations, toppings and sweet sauces	200	15,130	2559
06.3	Breakfast cereals	100	15,196	2559
06.4.3	Pre-cooked pastas and noodles and like products	200	15,130	2559
07.0	Bakery wares	200	15,180	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	100	15,130,167, XS96,XS97	2559
08.3	Processed comminuted meat, poultry, and game products	100	15,130,162, XS88,XS89, XS98	2559
09.2.1	Frozen fish, fish fillets, and fish products	200	15,180,392, XS36,XS92, XS95,XS165, XS190,XS191, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	200	15,180,XS166	2561
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	200	15,196,XS311	2559
09.3	Semi-preserved fish and fish products	200	15,180	2559
09.4	Fully preserved, including canned fish and fish products	200	15,180	2559

## BUTYLATED HYDROXYTOLUENE (บิวทิลไฮดรอกซีโทลูอีน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.2	Herbs, spices, seasonings, and condiments	200	15,130	2559
12.5	Soups and broths	200	15,130,340	2559
12.6	Sauces and like products	100	15,130	2559
13.6	Food supplements	400	15,196	2559
15.0	Ready-to-eat savouries	200	15,130	2559

## CALCIUM 5'-GUANYLATE (แคลเซียม 5'-กัวโนเลต)

INS: 629      Synonym: Calcium guanylate; Calcium      Functional Class: Flavour enhancer  
guaosine-5'-monophosphate

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559

## CALCIUM 5'-GUANYLATE (แคลเซียม 5'-กัวโนเลต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	100000		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	100000		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559

## CALCIUM 5'-GUANYLATE (แคลเซียม 5'-กัวโนเลต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CALCIUM 5'-INOSINATE (แคลเซียม 5'-ไอน์ซินเนต)

INS: 633      Synonym: Calcium inosinate; Calcium inosine-5'-monophosphate      Functional Class: Flavour enhancer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559



## CALCIUM 5'-INOSINATE (แคลเซียม 5'-ไอินซินเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559

## CALCIUM 5'-INOSINATE (แคลเซียม 5'-ไอินซินเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	100000		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	100000		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CALCIUM 5'-RIBONUCLEOTIDES (แคลเซียม 5'-ไรโบนิวคลีโอไทด์)

INS: 634      Synonym: Calcium ribonucleotides      Functional Class: Flavour enhancer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559

## CALCIUM 5'-RIBONUCLEOTIDES (แคลเซียม 5'-ไรโบนิวคลีโอไทด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP	279	2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559

## CALCIUM 5'-RIBONUCLEOTIDES (แคลเซียม 5'-ไรโบนิวคลีโอไทด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	100000		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	100000		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559

## CALCIUM 5'-RIBONUCLEOTIDES (แคลเซียม 5'-ไรโบนิวคลีโอไทด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CALCIUM ACETATE (แคลเซียมแอสซีเตต)

INS: 263

Synonym: -

Functional Class: Acidity regulator, Preservative,  
Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559

## CALCIUM ACETATE (แคลเซียมแอสีเตต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559

## CALCIUM ACETATE (แคลเซียมแอสีเตต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	GMP	239	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CALCIUM ALGINATE (แคลเซียมแอลจิเนต)

INS: 404      Synonym: Calcium salt of alginic acid      Functional Class: Foaming agent, Bulking agent, Carrier, Foaming agent, Gelling agent, Glazing agent, Humectant, Sequestrant, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559

## CALCIUM ALGINATE (แคลเซียมแอลจีเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559



## CALCIUM ALGinate (แคลเซียมแอลจีเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	XS36, XS92, XS95, XS165, XS190, XS191, XS292, XS312, XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	63	2561
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559

## CALCIUM ALGINATE (แคลเซียมแอลจีเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CALCIUM ASCORBATE (แคลเซียมแอสคอร์เบต)

INS: 302      Synonym: Calcium ascorbate dihydrate      Functional Class: Antioxidant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559

## CALCIUM ASCORBATE (แคลเซียมแอสคอร์เบต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.1.3	Peeled or cut fresh fruit	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.2	Dried pastas and noodles and like products	200	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.1.2	Fresh molluscs, crustaceans, and echinoderms	GMP	390, XS312, XS315	2561

## CALCIUM ASCORBATE (แคลเซียมแอสคอร์เบต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.1	Frozen fish, fish fillets, and fish products	GMP	308,392, XS36,XS92, XS95,XS165, XS190,XS191, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	139,XS166	2561
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.2	Follow-up formulae	50	70,72,315	2559
13.2	Complementary foods for infants and young children	200	239,317	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.2.1	Fruit juice	GMP		2559
14.1.2.3	Concentrates for fruit juice	GMP	127	2559

## CALCIUM ASCORBATE (แคลเซียมแอสคอร์เบต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.3.1	Fruit nectar	GMP		2559
14.1.3.3	Concentrates for fruit nectar	GMP	127	2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CALCIUM CARBONATE (แคลเซียมคาร์บอเนต)

INS: 170(i)    Synonym: Chalk; Carbonic acid calcium salt    Functional Class: Acidity regulator, Anticaking agent, Colour, Firming agent, Flour treatment agent, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP		2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	10000		2559

## CALCIUM CARBONATE (แคลเซียมคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	4,16,326	2559

## CALCIUM CARBONATE (แคลเซียมคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.1.2	Fresh meat, poultry and game, comminuted	GMP	4,16,281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	95,XS36,XS92, XS95,XS165, XS190,XS191, XS292,XS312, XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	16,XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4	Cooked and/or fried fish and fish products	GMP		2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	266,267	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.1	Salt	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559

## CALCIUM CARBONATE (แคลเซียมคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CALCIUM CHLORIDE (แคลเซียมคลอไรด์)

INS: 509

Synonym: -

Functional Class: Firming agent, Stabilizer,  
Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559



## CALCIUM CHLORIDE (แคลเซียมคลอไรด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.1	Frozen vegetables, seaweeds, nuts and seeds	GMP	29,323,324	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559

## CALCIUM CHLORIDE (แคลเซียมคลอไรด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41, XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP	58	2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559

## CALCIUM CHLORIDE (แคลเซียมคลอไรด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CALCIUM DI-L-GLUTAMATE (แคลเซียมได-แอล-กลูตาเมต)

INS: 623      Synonym: Calcium glutamate;  
Monocalcium di-L-glutamate      Functional Class: Flavour enhancer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559

## CALCIUM DI-L-GLUTAMATE (แคลเซียมไอดี-แอล-กลูตาเมต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559

## CALCIUM DI-L-GLUTAMATE (แคลเซียมไอดี-แอล-กลูตาเมต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	100000		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	100000		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CALCIUM GLUCONATE (แคลเซียมกลูโคเนต)

INS: 578      Synonym: Calcium di-D-gluconate monohydrate      Functional Class: Acidity regulator, Firming agent, Sequestrant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559

## CALCIUM GLUCONATE (แคลเซียมกลูโคเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559

## CALCIUM GLUCONATE (แคลเซียมกลูโคเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559

## CALCIUM GLUCONATE (แคลเซียมกลูโคเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CALCIUM HYDROXIDE (แคลเซียมไฮดรอกไซด์)

INS: 526      Synonym: Slaked lime      Functional Class: Acidity regulator, Firming agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	GMP		2559
02.2.1	Butter	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559



## CALCIUM HYDROXIDE (แคลเซียมไฮดรอกไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559

## CALCIUM HYDROXIDE (แคลเซียมไฮดรอกไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	2000	55,72	2559
13.1.2	Follow-up formulae	GMP	72	2559
13.1.3	Formulae for special medical purposes for infants	2000	55,72	2559
13.2	Complementary foods for infants and young children	GMP	239	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CALCIUM LACTATE (แคลเซียมแล็กเตต)

INS: 327	Synonym: Calcium dilactate; Calcium dilactate hydrate; 2-Hydroxypropanoic acid calcium salt	Functional Class: Acidity regulator, Emulsifying salt, Firming agent, Flour treatment agent, Thickener		
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559

## CALCIUM LACTATE (แคลเซียมแล็กเตต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.4.1	Pasteurized cream (plain)	GMP		2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	10000	58	2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559

## CALCIUM LACTATE (แคลเซียมแล็กเตต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41,XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4	Cooked and/or fried fish and fish products	GMP		2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	266,267	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559

## CALCIUM LACTATE (แคลเซียมแล็กเตต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	GMP	83,239	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CALCIUM MALATE, DL- (ดีแอล-แคลเซียมมาเลต)

INS: 352(ii)    Synonym: DL-Monocalcium malate;    Functional Class: Acidity regulator  
 Calcium DL-malate; Calcium-l-  
 hydroxysuccinate;  
 Hydroxybutanedioic acid  
 calcium salt

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559

## CALCIUM MALATE, DL- (ดีแอล-แคลเซียมมาเลต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559

## CALCIUM MALATE, DL- (ดีแอล-แคลเซียมมาเลต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559

## CALCIUM MALATE, DL- (ดีแอล-แคลเซียมมาเลต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CALCIUM OXIDE (แคลเซียมออกไซด์)

INS: 529

Synonym: Lime

Functional Class: Acidity regulator, Flour treatment agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559



## CALCIUM OXIDE (แคลเซียมออกไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559

## CALCIUM OXIDE (แคลเซียมออกไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CALCIUM PROPIONATE (แคลเซียมโพรพิโอเนต)

INS: 282      Synonym: Calcium propanoate      Functional Class: Preservative

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP	TH1,TH4	2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.6.6	Whey cheese	3000	70	2559
01.7	Dairy-based desserts	GMP	TH4,TH5	2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559

## CALCIUM PROPIONATE (แคลเซียมโพรพิโอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP	TH4	2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP	TH6	2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559

## CALCIUM PROPIONATE (แคลเซียมโพรพิโอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP	TH6	2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CALCIUM SILICATE (แคลเซียมซิลิเกต)

INS: 552

Synonym: -

Functional Class: Anticaking agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559

## CALCIUM SILICATE (แคลเซียมซิลิเกต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	10000		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559

## CALCIUM SILICATE (แคลเซียมซิลิเกต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.1.2	Powdered sugar, powdered dextrose	15000	56	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.1	Salt	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559

## CALCIUM SILICATE (แคลเซียมซิลิเกต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CALCIUM SULFATE (แคลเซียมซัลเฟต)

INS: 516      Synonym: -      Functional Class: Acidity regulator, Firming agent,  
Flour treatment agent, Sequestrant,  
Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.1	Frozen vegetables, seaweeds, nuts and seeds	GMP	29,323,324	2559

## CALCIUM SULFATE (แคลเซียมซัลเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559



## CALCIUM SULFATE (แคลเซียมซัลเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CANDELILLA WAX (แคนเดิลลิลลาแวกซ์)

INS: 902

Synonym: -

Functional Class: Carrier, Emulsifier, Glazing  
agent, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.1.2	Surface-treated fresh fruit	GMP		2559
04.2.1.2	Surface-treated fresh vegetables, seaweeds, nuts and seeds	GMP	79	2559
05.1.4	Cocoa and chocolate products	GMP	3	2559

## CANDELILLA WAX (แคนเดลีลาแวกซ์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.1.5	Imitation chocolate, chocolate substitute products	GMP	3	2559
05.2	Confectionery including candy, nougats and marzipans	GMP	3,XS309R	2561
05.3	Chewing gum	GMP		2559
05.4	Decorations, toppings and sweet sauces	GMP		2559
07.2	Fine bakery wares and mixes	GMP	3	2559
13.6	Food supplements	GMP	3	2559
14.1.4	Water-based flavoured drinks	200	127,131	2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	108	2559
15.0	Ready-to-eat savouries	GMP	3	2559

## CAMEL I - PLAIN CAMEL (คาราเมลกลุ่ม 1 - คาราเมลธรรมดา)

INS: 150a    Synonym: Class I: Plain caramel    Functional Class: Colour

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559

## CAMEL I - PLAIN CAMEL (คาราเมลกลุ่ม 1 - คาราเมลธรรมดา)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41	2561
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559

## CAMEL I - PLAIN CAMEL (คาราเมลกลุ่ม 1 - คาราเมลธรรมดา)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CAMEL II - SULFITE CAMEL (คาราเมลกลุ่ม 2 - คาราเมลซัลไฟต์)

INS: 150b    Synonym: Class II: Sulfite caramel    Functional Class: Colour

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	2000	52,400	2561

**CAMEL III - AMMONIA CAMEL (คาราเมลกลุ่มที่ 3 - แอมโมเนียคาราเมล)**

INS: 150c    Synonym: Class III: Ammonia caramel    Functional Class: Colour

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	500	52	2559
01.3.2	Beverage whiteners	500		2559
01.4.4	Cream analogues	2500		2559
01.5.2	Milk and cream powder analogues	2500		2559
01.6.1	Unripened cheese	7500	201	2559
01.6.2.2	Rind of ripened cheese	25000		2559
01.6.4.2	Flavoured processed cheese	25000		2559
01.6.5	Cheese analogues	25000		2559
01.7	Dairy-based desserts	1000		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	250		2559
02.3	Fat emulsions mainly of type oil-in- water	10000		2559
02.4	Fat-based desserts	10000		2559
03.0	Edible ices	1000		2559
04.1.2.3	Fruit in vinegar, oil, or brine	100		2559
04.1.2.4	Canned or bottled fruit	100		2559
04.1.2.5	Jams, jellies and marmalades	100		2559
04.1.2.6	Fruit-based spreads for spread or raw materials	250		2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	100		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	3750	182	2559
04.1.2.9	Fruit-based desserts	100		2559
04.1.2.11	Fruit fillings	3750		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	25000	76	2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	250		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	25000		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	25000		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	25000		2559

## CAMEL III - AMMONIA CAMEL (คาราเมลกลุ่มที่ 3 – แอมโมเนียคาราเมล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.7	Fermented vegetable and seaweed products	25000		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	25000		2559
05.1.2	Cocoa mixes (syrops)	25000		2559
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	25000	XS86	2559
05.1.4	Cocoa and chocolate products	25000	183	2559
05.1.5	Imitation chocolate, chocolate substitute products	25000		2559
05.2	Confectionery including candy, nougats and marzipans	50000	XS309R	2561
05.3	Chewing gum	10000		2559
05.4	Decorations, toppings and sweet sauces	25000		2559
06.3	Breakfast cereals	25000	189	2559
06.5	Cereal and starch based desserts	15000		2561
06.6	Batters	25000		2559
06.7	Pre-cooked or processed rice products	25000		2559
06.8.1	Soybean-based beverages	750		2559
06.8.8	Other soybean protein products	10000		2559
07.1.2	Crackers, excluding sweet crackers	15000		2561
07.1.3	Other ordinary bakery products	15000		2561
07.1.4	Bread-type products	15000		2561
07.1.5	Steamed breads and buns	15000		2561
07.1.6	Mixes for bread and ordinary bakery wares products of food categories 07.1.1-07.1.5	15000		2561
07.2	Fine bakery wares and mixes	15000		2561
08.0	Meat and meat products	GMP	3,4,16,XS88, XS89,XS96, XS97,XS98	2559
09.1	Fresh fish and fish products	15000	4,16,XS292, XS312,XS315	2561
09.2	Processed fish and fish products	15000	XS36,XS92, XS95,XS165, XS166,XS190, XS191,XS292, XS311,XS312, XS315	2561

## CAMEL III - AMMONIA CAMEL (คาราเมลกลุ่มที่ 3 - แอมโมเนียคาราเมล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.3	Semi-preserved fish and fish products	15000	95	2559
09.4	Fully preserved, including canned fish and fish products	250	50	2559
10.1	Fresh eggs	10000	4	2559
10.3	Preserved eggs	10000	4	2559
10.4	Egg-based desserts	10000		2559
11.4	Other sugars and syrups	25000	100	2559
12.2.2	Seasonings and condiments	30000		2559
12.3	Vinegars	500	78	2559
12.4	Mustards	25000		2559
12.5	Soups and broths	12500		2559
12.6	Sauces and like products	15000		2559
12.7	Salads and sandwich spreads	25000	89	2559
12.9.2.1	Fermented soybean sauce	10000	207	2559
12.9.2.2	Non-fermented soybean sauce	750		2559
12.9.2.3	Other soybean sauces, excluding products of food categories 12.9.2.1 and 12.9.2.2	15000		2559
13.3	Dietetic foods intended for special medical purposes	10000		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	10000		2559
13.5	Dietetic foods	10000		2559
13.6	Food supplements	20000		2559
14.1.4	Water-based flavoured drinks	4000	9,127	2561
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	5000	7,127,160	2559
14.2.1	Beer and malt beverages	25000		2559
14.2.2	Cider and perry	500		2559
14.2.3.3	Fortified grape wine, grape liquor wine, and sweet grape wine	25000		2559
14.2.4	Wines other than grape	500		2559
14.2.5	Mead	500		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	25000		2559
14.2.7	Aromatized alcoholic beverages	25000		2559
15.0	Ready-to-eat savouries	5000		2559

**CARAMEL IV - SULFITE AMMONIA CARAMEL (คาราเมลกลุ่มที่ 4 - ซัลไฟต์แอมโมเนียคาราเมล)**INS: 150d    Synonym: Class IV: Sulfito ammonia    Functional Class: Colour  
caramel

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	500	52	2559
01.2.1	Fermented milks (plain)	75	12	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3.2	Beverage whiteners	500		2559
01.4.4	Cream analogues	2500		2559
01.5.2	Milk and cream powder analogues	2500		2559
01.6.1	Unripened cheese	25000	201	2559
01.6.2.1	Ripened cheese, includes rind	25000	201	2559
01.6.2.2	Rind of ripened cheese	25000		2559
01.6.4.2	Flavoured processed cheese	25000	72	2559
01.6.5	Cheese analogues	25000	201	2559
01.7	Dairy-based desserts	2000		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	250	214	2559
02.4	Fat-based desserts	5000		2559
03.0	Edible ices	1000		2559
04.1.2.3	Fruit in vinegar, oil, or brine	3750		2559
04.1.2.4	Canned or bottled fruit	3750		2559
04.1.2.5	Jams, jellies and marmalades	750		2559
04.1.2.6	Fruit-based spreads for spread or raw materials	250		2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	3750		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	3750	182	2559
04.1.2.9	Fruit-based desserts	3750		2559
04.1.2.11	Fruit fillings	3750		2559
04.2.2	Processed vegetables, seaweeds, nuts and seeds	25000	92	2559
05.1.2	Cocoa mixes (syrups)	25000		2559
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	25000	XS86	2559
05.1.4	Cocoa and chocolate products	25000	183	2559
05.1.5	Imitation chocolate, chocolate substitute products	25000		2559



## CAMEL IV - SULFITE AMMONIA CAMEL (คาราเมลกลุ่มที่ 4 - ซัลไฟต์แอมโมเนียคาราเมล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.2	Confectionery including candy, nougats and marzipans	50000	XS309R	2561
05.3	Chewing gum	10000		2559
05.4	Decorations, toppings and sweet sauces	25000		2559
06.3	Breakfast cereals	1250		2559
06.4.2	Dried pastas and noodles and like products	25000	211	2559
06.5	Cereal and starch based desserts	1250		2559
06.6	Batters	1250		2559
06.7	Pre-cooked or processed rice products	1250		2559
06.8.8	Other soybean protein products	10000		2559
07.1.2	Crackers, excluding sweet crackers	25000		2559
07.1.3	Other ordinary bakery products	25000		2559
07.2	Fine bakery wares and mixes	600		2559
08.0	Meat and meat products	GMP	3,4,16,XS88, XS89,XS96, XS97,XS98	2559
09.2	Processed fish and fish products	15000	95,XS36, XS92,XS95, XS165,XS166, XS190,XS191, XS292,XS311, XS312,XS315	2561
09.3	Semi-preserved fish and fish products	15000	95	2559
09.4	Fully preserved, including canned fish and fish products	15000	95	2559
10.1	Fresh eggs	10000	4	2559
10.2	Egg products	10000		2559
10.3	Preserved eggs	10000		2559
10.4	Egg-based desserts	10000		2559
11.6	Table-top sweeteners directly sold to consumers	600	213	2559
12.2	Herbs, spices, seasonings, and condiments	5000		2559
12.3	Vinegars	25000		2559
12.4	Mustards	25000		2559
12.5	Soups and broths	12500	212	2559

CARAMEL IV - SULFITE AMMONIA CARAMEL (คาราเมลกลุ่มที่ 4 – ซัลไฟต์แอมโมเนียคาราเมล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.6	Sauces and like products	15000		2559
12.7	Salads and sandwich spreads	25000		2559
12.9.2.1	Fermented soybean sauce	15000		2559
13.3	Dietetic foods intended for special medical purposes	10000		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	10000		2559
13.5	Dietetic foods	10000		2559
13.6	Food supplements	10000		2559
14.1.4	Water-based flavoured drinks	4000	127	2561
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	5000	7,127	2559
14.2.1	Beer and malt beverages	25000		2559
14.2.2	Cider and perry	500		2559
14.2.3.3	Fortified grape wine, grape liquor wine, and sweet grape wine	25000		2559
14.2.4	Wines other than grape	500		2559
14.2.5	Mead	500		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	25000		2559
14.2.7	Aromatized alcoholic beverages	25000		2559
15.0	Ready-to-eat savouries	5000		2559

CARBOHYDRASE FROM *BACILLUS LICHENIFORMIS* (เอนไซม์คาร์โบไฮเดรตจากเชื้อบาคิลลัส ไลเคนิฟอร์มิส)

INS: 1100(vi)    Synonym: Diastase; Ptyalin;    Functional Class: Flour treatment agent  
Glycogenase

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559

CARBOHIDRASE FROM *BACILLUS LICHENIFORMIS* (เอนไซม์คาร์โบไฮเดรสจากเชื้อบาคิลลัสไลเคนิฟอร์มิส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.2	Flours and starches	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559

CARBOHIDRASE FROM *BACILLUS LICHENIFORMIS* (เอนไซม์คาร์โบไฮเดรสจากเชื้อบาคิลลัสไลเคนิฟอร์มิส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**CARBON DIOXIDE (คาร์บอนไดออกไซด์)**

INS: 290

Synonym: -

Functional Class: Carbonating agent, Foaming agent, Packaging gas, Preservative, Propellant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	59	2559
01.2.2	Renneted milk (plain)	GMP	59	2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP	59,278	2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.1.3	Peeled or cut fresh fruit	GMP	59	2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559

## CARBON DIOXIDE (คาร์บอนไดออกไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	59,211	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559

## CARBON DIOXIDE (คาร์บอนไดออกไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	GMP	59	2559
13.1.3	Formulae for special medical purposes for infants	GMP	59	2559
13.2	Complementary foods for infants and young children	GMP	59	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.1.2	Table waters and soda waters	GMP		2561
14.1.2.1	Fruit juice	GMP	69	2559
14.1.2.3	Concentrates for fruit juice	GMP	69,127	2559
14.1.3.1	Fruit nectar	GMP	69	2559
14.1.3.3	Concentrates for fruit nectar	GMP	69,127	2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	59,160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.3	Grape wines	GMP	60	2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**CARMINES (คาร์มีน)**

INS: 120      Synonym: Cochineal carmine;  
 Carmine; CI Natural Red 4; CI (1975)  
 No. 75470      Functional Class: Colour

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	112	52	2559
01.6.2.1	Ripened cheese, includes rind	125		2559
01.6.4.2	Flavoured processed cheese	100		2559
01.6.5	Cheese analogues	100	3,178	2559
01.7	Dairy-based desserts	150		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	500	178	2559
02.3	Fat emulsions mainly of type oil-in- water	500	178	2559
02.4	Fat-based desserts	150		2559
03.0	Edible ices	150		2559
04.1.1.2	Surface-treated fresh fruit	500	4,16	2559
04.1.2.4	Canned or bottled fruit	200		2559
04.1.2.5	Jams, jellies and marmalades	200		2559
04.1.2.6	Fruit-based spreads for spread or raw materials	500		2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	200		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	500	182	2559
04.1.2.9	Fruit-based desserts	150		2559
04.1.2.11	Fruit fillings	300		2559
04.2.1.2	Surface-treated fresh vegetables, seaweeds, nuts and seeds	500	4,16	2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	500	178	2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	100		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	200	92	2559
05.1.2	Cocoa mixes (syrups)	300		2559
05.1.5	Imitation chocolate, chocolate substitute products	300		2559



## CARMINES (คาร์มีน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.2	Confectionery including candy, nougats and marzipans	300	XS309R	2561
05.3	Chewing gum	500	178	2559
05.4	Decorations, toppings and sweet sauces	500		2559
06.3	Breakfast cereals	200		2559
06.4.3	Pre-cooked pastas and noodles and like products	100	153,178	2559
06.5	Cereal and starch based desserts	150		2559
06.6	Batters	500		2559
06.8.1	Soybean-based beverages	100	178	2559
07.1.2	Crackers, excluding sweet crackers	200	178	2559
07.1.4	Bread-type products	500	178	2559
07.2	Fine bakery wares and mixes	200		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	500	4,16	2559
08.1.2	Fresh meat, poultry and game, comminuted	100	4,16,117	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	500	16,XS96,XS97	2559
08.3.1.1	Cured (including salted) non-heat treated processed comminuted meat, poultry, and game products	200	118	2559
08.3.1.2	Cured (including salted) and dried non- heat treated processed comminuted meat, poultry, and game products	100		2559
08.3.1.3	Fermented non-heat treated processed comminuted meat, poultry, and game products	100		2559
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	100	XS88,XS89, XS98	2559
08.3.3	Frozen processed comminuted meat, poultry, and game products	500	16	2559
08.4	Edible casings	500	16	2559
09.1.1	Fresh fish	300	4,16,50	2559
09.1.2	Fresh molluscs, crustaceans, and echinoderms	500	4,16,XS292, XS312,XS315	2561

## CARMINES (คาร์มีน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.1	Frozen fish, fish fillets, and fish products	100	95,178,XS36, XS92,XS95, XS165,XS190, XS191,XS292, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	500	16,95,178, XS166	2561
09.2.3	Frozen minced and creamed fish products	500	16	2559
09.2.4.1	Cooked fish and fish products	500		2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	250		2559
09.2.4.3	Fried fish and fish products	500	16,95,178	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	300	22,XS311	2559
09.3.1	Fish and fish products marinated in vinegar or wine	500	16	2559
09.3.2	Pickled fish and fish products	500	16	2559
09.3.3	Caviar and other fish roe products	500		2559
09.3.4	Semi-preserved fish and fish products, excluding products of food categories 09.3.1 - 09.3.3	100		2559
09.4	Fully preserved, including canned fish and fish products	500	16	2559
10.1	Fresh eggs	GMP	4	2559
10.4	Egg-based desserts	150		2559
12.2.2	Seasonings and condiments	500		2559
12.4	Mustards	300		2559
12.5	Soups and broths	50		2559
12.6	Sauces and like products	500		2559
13.3	Dietetic foods intended for special medical purposes	50		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	50		2559
13.5	Dietetic foods	300		2559
13.6	Food supplements	300		2559
14.1.4	Water-based flavoured drinks	100	127,178	2559
14.2.1	Beer and malt beverages	100		2559
14.2.2	Cider and perry	200		2559
14.2.4	Wines other than grape	200		2559

## CARMINES (คาร์มีน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	200		2559
14.2.7	Aromatized alcoholic beverages	200	178	2559
15.1	Snacks - potato, cereal, flour or starch based	200		2559
15.2	Snacks - Processed nut or flavoured processed seed based	100		2559
15.3	Snacks - fish based	200	178	2559

## CARNAUBA WAX (คาร์เนนาบาแวกซ์)

INS: 903      Synonym: -      Functional Class: Acidity regulator, Anticaking agent, Bulking agent, Carrier, Glazing agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.1.2	Surface-treated fresh fruit	400		2559
04.1.2	Processed fruit	400		2559
04.2.1.2	Surface-treated fresh vegetables, seaweeds, nuts and seeds	400	79	2559
05.1.4	Cocoa and chocolate products	5000	3,XS87	2561
05.1.5	Imitation chocolate, chocolate substitute products	5000	3	2559
05.2	Confectionery including candy, nougats and marzipans	5000	3,XS309R	2561
05.3	Chewing gum	1200	3	2559
05.4	Decorations, toppings and sweet sauces	4000		2559
07.0	Bakery wares	GMP	3	2559
13.6	Food supplements	5000	3	2559
14.1.4	Water-based flavoured drinks	200	127,131	2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	200	127,108	2559
15.0	Ready-to-eat savouries	200	3	2559

**CAROB BEAN GUM (คารอบบีนกัม)**

INS: 410

Synonym: Locust bean gum

Functional Class: Emulsifier, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559

## CAROB BEAN GUM (คารอบปีนกัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	391,XS36, XS92,XS95, XS190,XS191, XS292,XS312, XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	177	2559
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559

## CAROB BEAN GUM (คารอบบีนกัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	1000	72	2559
13.1.2	Follow-up formulae	1000	72	2559
13.1.3	Formulae for special medical purposes for infants	1000	72	2559
13.2	Complementary foods for infants and young children	2000	271,272	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559

## CAROB BEAN GUM (คารอบบีนกัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CAROTENES, BETA-, VEGETABLE (บีตา-แคโรทีนจากผัก)

INS: 160a(ii)    Synonym: Natural  $\beta$ -carotene;    Functional Class: Colour  
 Carotenes-natural; CI Food  
 Orange 5, Mixed carotenes; CI  
 (1975) No. 75130; CI (1975) No.  
 40800  
 ( $\beta$ -Carotene)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	1000	52,401	2561
01.3.2	Beverage whiteners	1000		2559
01.4.4	Cream analogues	20		2559
01.5.2	Milk and cream powder analogues	1000		2559
01.6.1	Unripened cheese	600		2559
01.6.2.1	Ripened cheese, includes rind	600		2559
01.6.2.2	Rind of ripened cheese	1000		2559
01.6.2.3	Cheese powder	1000		2559
01.6.4	Processed cheese	1000		2559
01.6.5	Cheese analogues	1000	3	2559
01.7	Dairy-based desserts	1000		2559
02.1.2	Vegetable oils and fats	1000		2559
02.1.3	Animal oils and fats	1000		2559
02.2.1	Butter	600		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	1000		2559
02.3	Fat emulsions mainly of type oil-in- water	1000		2559
02.4	Fat-based desserts	1000		2559
03.0	Edible ices	1000		2559
04.1.2.3	Fruit in vinegar, oil, or brine	1000		2559
04.1.2.4	Canned or bottled fruit	1000		2559
04.1.2.5	Jams, jellies and marmalades	1000		2559

## CAROTENES, BETA-, VEGETABLE (บีตา-แคโรทีนจากผัก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.2.6	Fruit-based spreads for spread or raw materials	500		2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	1000		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	100	182	2559
04.1.2.9	Fruit-based desserts	1000		2559
04.1.2.10	Fermented fruit products	200		2559
04.1.2.11	Fruit fillings	100		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	200		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	1320		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	200		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	1000		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	1000	92	2559
04.2.2.7	Fermented vegetable and seaweed products	1000		2559
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	100	XS86	2559
05.1.4	Cocoa and chocolate products	100	183	2559
05.1.5	Imitation chocolate, chocolate substitute products	100		2559
05.2	Confectionery including candy, nougats and marzipans	500	XS309R	2561
05.3	Chewing gum	500		2559
05.4	Decorations, toppings and sweet sauces	20000		2559
06.3	Breakfast cereals	400		2559
06.4.2	Dried pastas and noodles and like products	1000	211	2559
06.4.3	Pre-cooked pastas and noodles and like products	1000	153	2559
06.5	Cereal and starch based desserts	1000		2559
06.6	Batters	1000		2559
07.1.2	Crackers, excluding sweet crackers	1000		2559



## CAROTENES, BETA-, VEGETABLE (บีตา-แคโรทีนจากผัก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
07.1.4	Bread-type products	1000		2559
07.2	Fine bakery wares and mixes	1000		2559
08.1.2	Fresh meat, poultry and game, comminuted	20	4,16	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	5000	16,XS96,XS97	2559
08.3.1	Non-heat treated processed comminuted meat, poultry, and game products	20	118	2559
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	20	XS88,XS89,XS98	2559
08.3.3	Frozen processed comminuted meat, poultry, and game products	5000	16	2559
08.4	Edible casings	5000		2559
09.1.1	Fresh fish	100	4,16,50	2559
09.2.2	Frozen battered fish, fish fillets and fish products	100	304	2561
09.2.3	Frozen minced and creamed fish products	1000	16	2559
09.2.4.1	Cooked fish and fish products	1000	95	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	1000		2559
09.2.4.3	Fried fish and fish products	1000	16	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	1000	XS311	2559
09.3.1	Fish and fish products marinated in vinegar or wine	1000	16	2559
09.3.2	Pickled fish and fish products	1000	16	2559
09.3.3	Caviar and other fish roe products	1000		2559
09.3.4	Semi-preserved fish and fish products, excluding products of food categories 09.3.1 - 09.3.33	1000	16	2559
09.4	Fully preserved, including canned fish and fish products	500		2559
10.1	Fresh eggs	1000	4	2559
10.2	Egg products	1000		2559
10.4	Egg-based desserts	150		2559
11.4	Other sugars and syrups	50		2559
12.2.2	Seasonings and condiments	500		2559
12.4	Mustards	1000		2559

## CAROTENES, BETA-, VEGETABLE (บีตา-แคโรทีนจากผัก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.5	Soups and broths	1000	341	2559
12.6.1	Emulsified sauces and dips	2000		2559
12.6.2	Non-emulsified sauces	2000		2559
12.6.3	Mixes for sauces and gravies	2000		2559
12.7	Salads and sandwich spreads	1000		2559
13.3	Dietetic foods intended for special medical purposes	600		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	600		2559
13.5	Dietetic foods	600		2559
13.6	Food supplements	600		2559
14.1.4	Water-based flavoured drinks	2000	127	2559
14.2.1	Beer and malt beverages	600		2559
14.2.2	Cider and perry	600		2559
14.2.4	Wines other than grape	600		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	600		2559
14.2.7	Aromatized alcoholic beverages	600		2559
15.1	Snacks - potato, cereal, flour or starch based	100		2559
15.2	Snacks - Processed nut or flavoured processed seed based	20000	3	2559
15.3	Snacks - fish based	100		2559

## CAROTENOIDS (กลุ่มแคโรทีนอยด์)

INS: 160a(i)	beta-Carotenes, synthetic (บีตา-แคโรทีนสังเคราะห์) Synonym: CI Food Orange 5; CI (1975) No. 40800	Functional Class: Colour
INS: 160a(iii)	beta-Carotenes, <i>Blakeslea trispora</i> (บีตา-แคโรทีนจากราบลาเคลเซีย ไทรสปอรา) Synonym: CI Food Orange 5	Functional Class: Colour
INS: 160e	Carotenal, beta-apo-8'- (บีตา-แอฟ-8'-แคโรทีนัล) Synonym: CI Food Orange 6; CI (1975) No. 40820	Functional Class: Colour
INS: 160f	Carotenoic acid, ethyl ester, beta-apo-8'- (เอทิลเอสเทอร์ของกรดบีตา-แอฟ-8'-แคโรทีนอิก) Synonym: CI Food Orange 7; CI (1975) No. 40825	Functional Class: Colour

## CAROTENOIDS (กลุ่มแคโรทีนอยด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	150	52,402	2561
01.3.2	Beverage whiteners	100		2559
01.4.4	Cream analogues	20		2559
01.5.2	Milk and cream powder analogues	100	209	2559
01.6.1	Unripened cheese	100		2559
01.6.2.1	Ripened cheese, includes rind	100		2559
01.6.2.2	Rind of ripened cheese	500		2559
01.6.2.3	Cheese powder	100		2559
01.6.4	Processed cheese	100		2559
01.6.5	Cheese analogues	200		2559
01.7	Dairy-based desserts	100		2559
02.1.2	Vegetable oils and fats	25	232	2559
02.1.3	Animal oils and fats	25		2559
02.2.1	Butter	25	146,291	2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	35		2559
02.3	Fat emulsions mainly of type oil-in-water	200		2559
02.4	Fat-based desserts	150		2559
03.0	Edible ices	200		2559
04.1.2.3	Fruit in vinegar, oil, or brine	1000		2559
04.1.2.4	Canned or bottled fruit	200		2559
04.1.2.5	Jams, jellies and marmalades	200		2559
04.1.2.6	Fruit-based spreads for spread or raw materials	500		2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	200		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	100	182	2559
04.1.2.9	Fruit-based desserts	150		2559
04.1.2.10	Fermented fruit products	500		2559
04.1.2.11	Fruit fillings	100		2559
04.2.1.2	Surface-treated fresh vegetables, seaweeds, nuts and seeds	500	4,16	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	1000		2559

## CAROTENOIDS (กลุ่มแคโรทีนอยด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	50		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	50		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	50		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	50	92	2559
04.2.2.7	Fermented vegetable and seaweed products	50		2559
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	100	XS86	2559
05.1.4	Cocoa and chocolate products	100	183	2559
05.1.5	Imitation chocolate, chocolate substitute products	100		2559
05.2	Confectionery including candy, nougats and marzipans	100	XS309R	2561
05.3	Chewing gum	100		2559
05.4	Decorations, toppings and sweet sauces	100		2559
06.3	Breakfast cereals	200		2559
06.4.3	Pre-cooked pastas and noodles and like products	200	153	2561
06.5	Cereal and starch based desserts	150		2559
06.6	Batters	500		2559
07.1.2	Crackers, excluding sweet crackers	1000		2559
07.1.3	Other ordinary bakery products	100		2559
07.1.4	Bread-type products	200	116	2559
07.1.5	Steamed breads and buns	100	216	2559
07.2	Fine bakery wares and mixes	100		2559
08.1.2	Fresh meat, poultry and game, comminuted	100	4,16	2559
08.3.1.1	Cured (including salted) non-heat treated processed comminuted meat, poultry, and game products	100	16	2559
08.3.1.2	Cured (including salted) and dried non- heat treated processed comminuted meat, poultry, and game products	20	16	2559
08.3.1.3	Fermented non-heat treated processed comminuted meat, poultry, and game products	20	16	2559

## CAROTENOIDS (กลุ่มแคโรทีนอยด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	20	16,XS88, XS89,XS98	2559
08.4	Edible casings	100		2559
09.1.1	Fresh fish	300	4	2559
09.1.2	Fresh molluscs, crustaceans, and echinoderms	100	4,16, XS292, XS312,XS315	2561
09.2	Processed fish and fish products	100	95,304,XS36, XS92,XS95, XS165,XS166, XS190,XS191, XS292,XS311, XS312,XS315	2561
09.3	Semi-preserved fish and fish products	100	95	2559
09.4	Fully preserved, including canned fish and fish products	100	95	2559
10.1	Fresh eggs	1000	4	2559
10.4	Egg-based desserts	150		2559
11.4	Other sugars and syrups	50	217	2559
12.2.2	Seasonings and condiments	500		2559
12.4	Mustards	300		2559
12.5	Soups and broths	300	341	2559
12.6	Sauces and like products	500		2559
12.7	Salads and sandwich spreads	50		2559
13.3	Dietetic foods intended for special medical purposes	50		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	50		2559
13.5	Dietetic foods	300		2559
13.6	Food supplements	300		2559
14.1.4	Water-based flavoured drinks	100	127	2559
14.2.2	Cider and perry	200		2559
14.2.4	Wines other than grape	200		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	200		2559
14.2.7	Aromatized alcoholic beverages	200		2559
15.1	Snacks - potato, cereal, flour or starch based	100		2559
15.2	Snacks - Processed nut or flavoured processed seed based	100		2559

**CARRAGEENAN (แครร์ราจีแนน)**

INS: 407	Synonym: Irish moss gelose (from <i>Chondrus</i> spp.); Eucheuman (from <i>Eucheuma</i> spp.); Iridophycan (from <i>Iridaea</i> spp.); Hypnean (from <i>Hypnea</i> spp.); Furcellaran or Danish agar (from <i>Furcellaria fastigiata</i> )	Functional Class: Bulking agent, Carrier, Emulsifier, Gelling agent, Glazing agent, Humectant, Stabilizer, Thickener
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559

## CARRAGEENAN (แคร์ราจีแนน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	332,391, XS36,XS92, XS95,XS190, XS191,XS292, XS312,XS315	2561

## CARRAGEENAN (แควร์ราจีแนน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	177,332	2559
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.4.1	Cooked fish and fish products	GMP	16,325	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	GMP	16,325	2559
09.2.4.3	Fried fish and fish products	GMP	41,325,332	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300,332	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	300	378,381	2559
13.1.2	Follow-up formulae	300	72,151,328,329	2559
13.1.3	Formulae for special medical purposes for infants	1000	379,381	2559



## CARRAGEENAN (แคร์ราจีแนน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CASSIA GUM (แคสเซียกัม)

INS: 427      Synonym: -      Functional Class: Emulsifier, Gelling agent, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559

## CASSIA GUM (แคสเซียกัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559

## CASSIA GUM (แคสเซียกัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CASTOR OIL (น้ำมันละหุ่ง)

INS: 1503      Synonym: Ricinus oil      Functional Class: Anticaking agent, Carrier, Emulsifier, Glazing agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.1.4	Cocoa and chocolate products	350	XS87	2561
05.2	Confectionery including candy, nougats and marzipans	500	XS309R	2561
05.3	Chewing gum	2100		2559
13.6	Food supplements	1000		2559

**CHLORINE (คลอรีน)**

INS: 925

Synonym: -

Functional Class: Flour treatment agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.2.1	Flours	2500	87	2559

**CHLOROPHYLLS (คลอโรฟิลล์)**

INS: 140

Synonym: Magnesium chlorophyll;  
magnesium phaeophytin;  
CI Natural Green 3; C.I. (1975)  
No. 75810

Functional Class: Colour

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559

## CHLOROPHYLLS (คลอโรฟิลล์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559

## CHLOROPHYLLS (คลอโรฟิลล์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES

## (กลุ่มสารประกอบเชิงซ้อนของคอปเปอร์กับคลอโรฟิลล์และคลอโรฟิลลิน)

INS: 141(i)	Chlorophylls, copper complexes (กลุ่มสารประกอบเชิงซ้อนของคอปเปอร์กับคลอโรฟิลล์) Synonym: Copper chlorophyll; Copper phaeophytin; CI Natural Green 3; C.I. (1975) No. 75810	Functional Class: Colour		
INS: 141(ii)	Chlorophyllin copper complexes, potassium and sodium salts (เกลือโพแทสเซียมหรือเกลือโซเดียมของกลุ่มสารประกอบเชิงซ้อนของคอปเปอร์กับคลอโรฟิลลิน) Synonym: Sodium copper chlorophyllin; Potassium copper chlorophyllin; C.I. (1975) No. 75815	Functional Class: Colour		

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
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## CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES

(กลุ่มสารประกอบเชิงซ้อนของคอปเปอร์กับคลอโรฟิลล์และคลอโรฟิลลิน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	50	52,190	2559
01.6.1	Unripened cheese	50		2559
01.6.2.1	Ripened cheese, includes rind	15		2559
01.6.2.2	Rind of ripened cheese	75		2559
01.6.2.3	Cheese powder	50		2559
01.6.4.2	Flavoured processed cheese	50		2559
01.6.5	Cheese analogues	50		2559
01.7	Dairy-based desserts	500		2559
02.4	Fat-based desserts	500		2559
03.0	Edible ices	500		2559
04.1.2.3	Fruit in vinegar, oil, or brine	100	62	2559
04.1.2.4	Canned or bottled fruit	100	62	2559
04.1.2.5	Jams, jellies and marmalades	200		2559
04.1.2.6	Fruit-based spreads for spread or raw materials	150		2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	250		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	100	62,182	2559
04.1.2.9	Fruit-based desserts	150		2559
04.1.2.10	Fermented fruit products	100	62	2559
04.1.2.11	Fruit fillings	100	62	2559
04.1.2.12	Cooked fruit	100	62	2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	100	62	2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	100	62,92	2559
04.2.2.7	Fermented vegetable and seaweed products	100	62	2559
04.2.2.8	Cooked or fried vegetables and seaweeds	100	62	2559
05.1.2	Cocoa mixes (syrops)	6.4	62	2559
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	6.4	62,XS86	2559
05.1.4	Cocoa and chocolate products	700	183	2559
05.1.5	Imitation chocolate, chocolate substitute products	700		2559

## CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES

(กลุ่มสารประกอบเชิงซ้อนของคอปเปอร์กับคลอโรฟิลล์และคลอโรฟิลลิน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.2.1	Hard candy	700		2559
05.2.2	Soft candy and other desserts, excluding products of food categories 01.7, 02.4, 04.1.2.9 and 06.5	100	XS309R	2561
05.2.3	Nougats and marzipans	100		2559
05.3	Chewing gum	700		2559
05.4	Decorations, toppings and sweet sauces	100		2559
06.4.3	Pre-cooked pastas and noodles and like products	100	153	2559
06.5	Cereal and starch based desserts	75		2559
07.1.4	Bread-type products	6.4	62	2559
07.2	Fine bakery wares and mixes	75		2559
09.2.3	Frozen minced and creamed fish products	40	95	2559
09.2.4.1	Cooked fish and fish products	30	62,95	2559
09.2.4.3	Fried fish and fish products	40	95	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	200	XS311	2559
09.3.1	Fish and fish products marinated in vinegar or wine	40	16	2559
09.3.2	Pickled fish and fish products	40	16	2559
09.3.3	Caviar and other fish roe products	200		2559
09.3.4	Semi-preserved fish and fish products, excluding products of food categories 09.3.1 - 09.3.3	75	95	2559
09.4	Fully preserved, including canned fish and fish products	500	95	2559
10.4	Egg-based desserts	300	2	2559
11.4	Other sugars and syrups	64	62	2559
12.2.2	Seasonings and condiments	500		2559
12.4	Mustards	500		2559
12.5	Soups and broths	400	342	2559
12.6	Sauces and like products	100		2559
13.6	Food supplements	500	3	2559
14.1.4	Water-based flavoured drinks	300	127	2559
15.1	Snacks - potato, cereal, flour or starch based	350		2559



## CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES

(กลุ่มสารประกอบเชิงซ้อนของคอปเปอร์กับคลอโรฟิลล์และคลอโรฟิลลิน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
15.2	Snacks - Processed nut or flavoured processed seed based	100		2559
15.3	Snacks - fish based	350		2559

**CITRIC ACID (กรดซิตริก)**

INS: 330

Synonym: 2-hydroxy-1,2,3-  
propanetricarboxylic acidFunctional Class: Acidity regulator, Antioxidant,  
Colour retention agent, Sequestrant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP		2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.6.6	Whey cheese	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.1.1	Butter oil, anhydrous milkfat, ghee	GMP	171	2559
02.1.2	Vegetable oils and fats	GMP	15,277	2559
02.1.3	Animal oils and fats	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559

## CITRIC ACID (กรดซิตริก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.2	Processed fruit	GMP		2559
04.2.1.1	Untreated fresh vegetables, seaweeds, nuts and seeds	GMP	262,264	2559
04.2.2.1	Frozen vegetables, seaweeds, nuts and seeds	GMP	242,262, 264,265	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	15,281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559

## CITRIC ACID (กรดซิตริก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.4	Edible casings	GMP		2559
09.1.2	Fresh molluscs, crustaceans, and echinoderms	GMP	390,XS312, XS315	2561
09.2.1	Frozen fish, fish fillets, and fish products	GMP	331,391, 392,XS36, XS95,XS190, XS191,XS312, XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	61	2559
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4	Cooked and/or fried fish and fish products	GMP		2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	267	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559

## CITRIC ACID (กรดซิตริก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.1.1	Infant formulae	GMP	72	2559
13.1.2	Follow-up formulae	GMP	72	2559
13.1.3	Formulae for special medical purposes for infants	GMP	72	2559
13.2	Complementary foods for infants and young children	5000	238	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.2.1	Fruit juice	3000	122	2559
14.1.2.2	Vegetable juice	GMP		2559
14.1.2.3	Concentrates for fruit juice	3000	122,127	2559
14.1.2.4	Concentrates for vegetable juice	GMP		2559
14.1.3.1	Fruit nectar	5000		2559
14.1.3.2	Vegetable nectar	GMP		2559
14.1.3.3	Concentrates for fruit nectar	5000	127	2559
14.1.3.4	Concentrates for vegetable nectar	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**CITRIC AND FATTY ACID ESTERS OF GLYCEROL (เอสเทอร์ของกลีเซอรอลของกรดซิตริกและกรดไขมัน)**

INS: 472c      Synonym: Citric acid esters of mono- and di-glycerides; Citroglycerides; CITREM      Functional Class: Antioxidant, Emulsifier, Flour treatment agent, Sequestrant, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.1.2	Vegetable oils and fats	100	277	2559
02.1.3	Animal oils and fats	100	322	2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559

## CITRIC AND FATTY ACID ESTERS OF GLYCEROL (เอสเทอร์ของกลีเซอรอลของกรดซิตริกและกรดไขมัน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.1.2	Fresh molluscs, crustaceans, and echinoderms	GMP	390,XS312, XS315	2561
09.2.1	Frozen fish, fish fillets, and fish products	GMP	392,XS36,XS92, XS95,XS165, XS190,XS191, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	16,XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP	16	2559

## CITRIC AND FATTY ACID ESTERS OF GLYCEROL (เอสเทอร์ของกลีเซอรอลของกรดซิตริกและกรดไขมัน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1	Infant formulae, follow-on formulae, and formulae for special medical purposes for infants	9000	380,381	2559
13.2	Complementary foods for infants and young children	5000	239,268	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559

## CITRIC AND FATTY ACID ESTERS OF GLYCEROL (เอสเทอร์ของกลีเซอรอลของกรดซิตริกและกรดไขมัน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CROSS-LINKED SODIUM CARBOXYMETHYL CELLULOSE (ครอสส์-ลิงค์เคตโซเดียมคาร์บอกซิเมทิลเซลลูโลส)

INS: 468	Synonym: Cross-linked carboxymethyl Cellulose; Cross-linked sodium CMC; Crosslinked CMC; Croscarmellose sodium; Cross-linked cellulose gum	Functional Class: Stabilizer, Thickener		
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559



## CROSS-LINKED SODIUM CARBOXYMETHYL CELLULOSE (ครอสส์-ลิงค์โซเดียมคาร์บอกซีเมทิลเซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559

## CROSS-LINKED SODIUM CARBOXYMETHYL CELLULOSE (ครอสส์-ลิงค์โซเดียมคาร์บอกซีเมทิลเซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CURCUMIN (เคอร์คูมิน)

INS: 100(i)    Synonym: Turmeric yellow, Kurkum    Functional Class: Colour

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	50	52	2561
01.7	Dairy-based desserts	100	TH13,TH18	2561
02.4	Fat-based desserts	100	TH13,TH18	2561
03.0	Edible ices	10		2561
04.1.2.9	Fruit-based desserts	50		2559
05.2.1	Hard candy	1000		2559

## CURCUMIN (เคอร์คูมิน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.2.2	Soft candy and other desserts, excluding products of food categories 01.7, 02.4, 04.1.2.9 and 06.5	480		2559
05.2.3	Nougats and marzipans	480		2559
05.3	Chewing gum	480		2559
05.4	Decorations, toppings and sweet sauces	50		2559
12.2.2	Seasonings and condiments	480		2559
12.5	Soups and broths	50	99	2559
12.6.1	Emulsified sauces and dips	480		2559
13.3	Dietetic foods intended for special medical purposes	50		2559
16.0	Prepared foods	300		2559

## CURDLAN (เคิร์ดแลน)

INS: 424      Synonym: beta-1,3-Glucan      Functional Class: Firming agent, Gelling agent,  
Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559

## CURDLAN (เคิร์ดแลน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559

## CURDLAN (เคิร์ดแลน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CYCLAMATES (กลุ่มซัยคลาเมต)

INS: 952(i)	Cyclamic acid (กรดซัยคลาไมก) Synonym: Cyclohexylsulfamic acid; Cyclohexanesulfamic acid	Functional Class: Sweetener
INS: 952(ii)	Calcium cyclamate (แคลเซียม ซัยคลาเมต) Synonym: Calcium cyclohexylsulfamate; Calcium cyclohexanesulfamate	Functional Class: Sweetener
INS: 952(iv)	Sodium cyclamate (โซเดียม ซัยคลาเมต) Synonym: Sodium cyclohexylsulfamate; Sodium cyclohexanesulfamate	Functional Class: Sweetener

## CYCLAMATES (กลุ่มซัยคลาเมต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	250	17,TH1	2559
01.7	Dairy-based desserts	250	17	2559
02.4	Fat-based desserts	250	17	2559
03.0	Edible ices	250	17	2559
04.1.2.4	Canned or bottled fruit	1000	17	2559
04.1.2.6	Fruit-based spreads for spread or raw materials	2000	17	2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	250	17	2559
04.1.2.9	Fruit-based desserts	250	17	2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	250	17	2559
05.1.2	Cocoa mixes (syrups)	250	17,127	2559
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	500	17,XS86	2559
05.1.4	Cocoa and chocolate products	500	17,TH2	2559
05.1.5	Imitation chocolate, chocolate substitute products	500	17	2559
05.2	Confectionery including candy, nougats and marzipans	500	17,156,XS309R	2561
05.3	Chewing gum	3000	17	2559
05.4	Decorations, toppings and sweet sauces	500	17	2559
06.5	Cereal and starch based desserts	250	17	2559
07.2	Fine bakery wares and mixes	1600	17,165	2559
10.4	Egg-based desserts	250	17	2559
11.4	Other sugars and syrups	500	17,159	2559
11.6	Table-top sweeteners directly sold to consumers	GMP	17	2559
12.6.1	Emulsified sauces and dips	500	17	2559
12.7	Salads and sandwich spreads	500	17	2559
13.3	Dietetic foods intended for special medical purposes	400	17	2559
13.4	Dietetic formulae for slimming purposes and weight reduction	400	17	2559
13.5	Dietetic foods	400	17	2559
13.6	Food supplements	1250	17	2559
14.1.3.1	Fruit nectar	400	17,122	2559

## CYCLAMATES (กลุ่มซัยคลาเมต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.3.2	Vegetable nectar	400	17	2559
14.1.3.3	Concentrates for fruit nectar	400	17,122,127	2559
14.1.3.4	Concentrates for vegetable nectar	400	17,127	2559
14.1.4	Water-based flavoured drinks	350	17,127,TH3	2559
14.2.7	Aromatized alcoholic beverages	250	17	2559

## CYCLODEXTRIN, ALPHA- (แอลฟา-ไซโคลเดกซ์ทริน)

INS: 457

Synonym: -

Functional Class: Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559

## CYCLODEXTRIN, ALPHA- (แอลฟา-ไซโคลเดกซ์ทริน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559



## CYCLODEXTRIN, ALPHA- (แอลฟา-ไซโคลเดกซ์ทริน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CYCLODEXTRIN, BETA- (บีตา-ไซโคลเดกซ์ทริน)

INS: 459      Synonym: Beta-cyclodextrin;  $\beta$ CD; BCD;  $\beta$ -Schardinger dextrin; Cyclodextrin B; Cycloheptaamylose      Functional Class: Carrier, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.3	Chewing gum	20000		2559
06.4.3	Pre-cooked pastas and noodles and like products	1000	153	2559
14.1.4	Water-based flavoured drinks	500	127	2559
15.1	Snacks - potato, cereal, flour or starch based	500		2559

## CYCLODEXTRIN, GAMMA- (แกมมา-ไซโคลเดกซ์ทริน)

INS: 458      Synonym: -      Functional Class: Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559

## CYCLODEXTRIN, GAMMA- (แกมมา-ไซโคลเดกซ์ทริน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559

## CYCLODEXTRIN, GAMMA- (แกมมา-ไซโคลเดกซ์ทริน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559

## CYCLODEXTRIN, GAMMA- (แกมมา-ไซโคลเดกซ์ทริน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CYCLOTETRAGLUCOSE (ไซโคลเททระกลูโคส)

INS: 1504(i)    Synonym: Cyclotetraose; Cyclic nigerosyl-(1→6)-nigerose; cycloalternan; cycloalternanotetraose    Functional Class: Carrier, Glazing agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559

## CYCLOTETRAGLUKOSE (ไซโคลเททระกลูโคส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559

## CYCLOTETRAGLUCOSE (ไซโคลเททระกลูโคส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## CYCLOTETRAGLUCOSE SYRUP (ไซโคลเททระกลูโคสไซรัป)

INS: 1504(ii)    Synonym: Cyclotetraglucose syrup;    Functional Class: Carrier  
 Cyclic nigerosyl-(1→6)-nigerose syrup; Cycloalteman syrup; Cycloalternanotetraose syrup

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559

## CYCLOTETRAGLUKOSE SYRUP (ไซโคลเททระกลูโคสไซรัป)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559

## CYCLOTETRAGLUPOSE SYRUP (ไซโคลเททระกลูโคสไซรัป)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## DEXTRINS, ROASTED STARCH (เดกซ์ทรินจากสตาร์ชคั่ว)

INS: 1400      Synonym: -      Functional Class: Carrier, Emulsifier, Stabilizer,  
Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat- treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559



## DEXTRINS, ROASTED STARCH (เดกซ์ทรินจากสตาร์ชข้าว)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP	236	2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559

## DEXTRINS, ROASTED STARCH (เดกซ์ทรีนจากสตาร์ชข้าว)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	3,53,XS36, XS92,XS95, XS165,XS190, XS191,XS292, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559

## DEXTRINS, ROASTED STARCH (เดกซ์ทรีนจากสตาร์ชคั่ว)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	90,160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## DIACETYLTARTARIC AND FATTY ACID ESTERS OF GLYCEROL

(เอสเตอร์ของกลีเซอรอลของกรดไดแอซีทิลทาร์ทริกและกรดไขมัน)

INS: 472e	Synonym: Diacetyltartaric acid esters of mono- and diglycerides; DATEM; Tartaric, acetic and fatty acid esters of glycerol; mixed; Mixed acetic and tartaric acid esters of mono and diglycerides of fatty acids	Functional Class: Emulsifier, Sequestrant, Stabilizer		
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
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## DIACETYLTARTARIC AND FATTY ACID ESTERS OF GLYCEROL

(เอสเตอรืของกลีเซอรอลของกรดไดแอซีทิลทาร์ทาริกและกรดไขมัน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	5000		2559
01.2.2	Renneted milk (plain)	5000		2559
01.3.2	Beverage whiteners	5000		2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	6000		2559
01.4.3	Clotted cream (plain)	5000		2559
01.4.4	Cream analogues	6000		2559
01.5.2	Milk and cream powder analogues	10000		2559
01.6.2.1	Ripened cheese, includes rind	10000		2559
01.6.4	Processed cheese	10000		2559
01.6.5	Cheese analogues	10000		2559
02.3	Fat emulsions mainly of type oil-in-water	10000		2559
04.1.2.3	Fruit in vinegar, oil, or brine	1000		2559
04.1.2.6	Fruit-based spreads for spread or raw materials	5000		2559
04.1.2.10	Fermented fruit products	2500		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	2500		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	2500		2559
05.2	Confectionery including candy, nougats and marzipans	10000	XS309R	2561
05.3	Chewing gum	50000		2559
05.4	Decorations, toppings and sweet sauces	10000		2559
06.6	Batters	5000		2559
07.1	Bread and ordinary bakery wares and mixes	6000		2559
07.2	Fine bakery wares and mixes	20000		2559
10.2.3	Dried and/or heat coagulated egg products	5000		2559
12.1.2	Salt substitutes	16000		2559
12.4	Mustards	10000		2559
12.6	Sauces and like products	10000		2559

## DIACETYLTARTARIC AND FATTY ACID ESTERS OF GLYCEROL

(เอสเทอร์ของกลีเซอรอลของกรดไดแอซีทิลทาร์ทาริกและกรดไขมัน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.3	Dietetic foods intended for special medical purposes	5000		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	5000		2559
13.5	Dietetic foods	5000		2559
13.6	Food supplements	5000		2559
14.1.4.2	Non-carbonated water-based flavoured drinks	1000		2561
14.2.2	Cider and perry	5000		2559
14.2.4	Wines other than grape	5000		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	5000		2559
14.2.7	Aromatized alcoholic beverages	10000		2559

## DIMETHYL DICARBONATE (ไดเมทิล ไดคาร์บอเนต)

INS: 242      Synonym: DMDC; Dimethyl pyrocarbonate      Functional Class: Preservative

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.4	Water-based flavoured drinks	250	18,127	2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	250	18,127	2559
14.2.2	Cider and perry	250	18	2559
14.2.3	Grape wines	200	18	2559
14.2.4	Wines other than grape	250	18	2559
14.2.5	Mead	200	18	2559

## DIOCTYL SODIUM SULFOSUCCINATE (ไดออกทิล โซเดียม ซัลโฟซักซินเนต)

INS: 480      Synonym: DSS, docusate sodium      Functional Class: Emulsifier, Sequestrant, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.2.9	Fruit-based desserts	15	383,384,385	2561

**DIPOTASSIUM 5'-GUANYLATE (ไดโพแทสเซียม 5'-กัวโนเลต)**

INS: 628      Synonym: Potassium guanylate;      Functional Class: Flavour enhancer  
                  Potassium 5'-guanylate;  
                  Dipotassium guanosine-5'-  
                  monophosphate

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559

## DIPOTASSIUM 5'-GUANYLATE (ไดโพแทสเซียม 5'-กัวโนเลต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	100000		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	100000		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559

## DIPOTASSIUM 5'-GUANYLATE (ไดโพแทสเซียม 5'-กัวโนเลต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## DISODIUM 5'-GUANYLATE (ไดโซเดียม 5'-กัวโนเลต)

INS: 627      Synonym: Sodium 5'-guanylate;  
Sodium guanylate; GMP;  
Disodium guanosine-5'-  
monophosphate      Functional Class: Flavour enhancer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559



## DISODIUM 5'-GUANYLATE (ไดโซเดียม 5'-กัวโนเลต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP	279	2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1	Fresh meat, poultry, and game	GMP	16	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	95,XS36, XS92,XS95, XS165,XS190, XS191,XS292, XS312,XS315	2561

## DISODIUM 5'-GUANYLATE (ไดโซเดียม 5'-กัวโนเลต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	309,XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP	311	2559
09.2.4	Cooked and/or fried fish and fish products	GMP	312	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	29	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	100000		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	100000		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	201	2559

## DISODIUM 5'-GUANYLATE (ไดโซเดียม 5'-กัวโนเลต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## DISODIUM 5'-INOSINATE (ไดโซเดียม 5' ไอนินซินเนต)

INS: 631	Synonym: Sodium 5'-inosinate; Sodium inosinate; IMP; Disodium inosine-5'- monophosphate	Functional Class: Flavour enhancer
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559

## DISODIUM 5'-INOSINATE (ไดโซเดียม 5' ไอน์ซินเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP	279	2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1	Fresh meat, poultry, and game	GMP	16	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	95,XS36, XS92,XS95, XS165,XS190, XS191,XS292, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	309,XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP	311	2559

## DISODIUM 5'-INOSINATE (ไดโซเดียม 5' ไอโนซิเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.4	Cooked and/or fried fish and fish products	GMP	312	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	29	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	100000		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	100000		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	201	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559

## DISODIUM 5'-INOSINATE (ไดโซเดียม 5' ไอโนซิเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## DISODIUM 5'-RIBONUCLEOTIDES (ไดโซเดียม 5'-ไรโบนิวคลีโอไทด์)

INS: 635      Synonym: Sodium 5'-ribonucleotides;      Functional Class: Flavour enhancer  
Sodium ribonucleotides

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559

## DISODIUM 5'-RIBONUCLEOTIDES (ไดโซเดียม 5'-ไรโบนิวคลีโอไทด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP	279	2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	95,XS36, XS92,XS95, XS165,XS190, XS191,XS292, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	309,XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP	311	2559
09.2.4	Cooked and/or fried fish and fish products	GMP	312	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	29	2559
09.3	Semi-preserved fish and fish products	GMP		2559

## DISODIUM 5'-RIBONUCLEOTIDES (ไดโซเดียม 5'-ไรโบนิวคลีโอไทด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	100000		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	100000		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	201	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559



**DISODIUM SUCCINATE (ไดโซเดียมซัคซิเนต)**

INS: 364(ii)

Synonym: -

Functional Class: Flavour enhancer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.2.3	Frozen processed meat, poultry and game products in whole pieces or cuts	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP		2559
09.3.3	Caviar and other fish roe products	GMP		2559
12.2.2	Seasonings and condiments	100000		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	100000		2559

**DISTARCH PHOSPHATE (ไดสตาร์ชฟอสเฟต)**

INS: 1412

Synonym: -

Functional Class: Emulsifier, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559

## DISTARCH PHOSPHATE (ไดสตาร์ชฟอสเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	63	2559
09.2.4.1	Cooked fish and fish products	GMP		2561

## DISTARCH PHOSPHATE (ไดสตาร์ชฟอสเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	5000	72,150,284,292	2559
13.1.2	Follow-up formulae	5000	72,150,285,292	2559
13.1.3	Formulae for special medical purposes for infants	5000	72,150,292	2559
13.2	Complementary foods for infants and young children	50000	269,270	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559

## DISTARCH PHOSPHATE (ไดสตาร์ชฟอสเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## DL-ALANINE (ดีแอลแอละนีน)

INS: -      Synonym: -      Functional Class: Flavour enhancer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559

## DL-ALANINE (ดีแอลแอละนีน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	100000		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	100000		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559

## DL-ALANINE (ดีแอลแอละนีน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## EDIBLE GELATIN (เจลาตินชนิดรับประทานได้)

INS: 428

Synonym: Gelatin edible

Functional Class: Stabilizer, Gelling agent,  
Emulsifier

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559

## EDIBLE GELATIN (เจลาตินชนิดรับประทานได้)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559

## EDIBLE GELATIN (เจลาตินชนิดรับประทานได้)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## ERYTHORBIC ACID (กรดอีริทอร์บิก)

INS: 315	Synonym: Isoascorbic acid; D-arboascorbic acid; D-Erythro-hex-2-enoic acid delta-lactone; Isoascorbic acid; D-isoascorbic acid	Functional Class: Antioxidant		
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559



## ERYTHORBIC ACID (กรดอีริทอร์บิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.1.2	Fresh molluscs, crustaceans, and echinoderms	GMP	390, XS312, XS315	2561

## ERYTHORBIC ACID (กรดอีริทอร์บิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.1	Frozen fish, fish fillets, and fish products	GMP	308,392, XS36,XS92, XS95,XS165, XS190,XS191, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	139,XS166	2561
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559

## ERYTHORBIC ACID (กรดอีริทอร์บิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## ERYTHRITOL (อีริทริทอล)

INS: 968	Synonym: Meso-erythritol; Erythrite tetrahydroxybutane; 1,2,3,4- Butanetetrol	Functional Class: Flavour enhancer, Humectant, Sweetener		
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559

## ERYTHRITOL (อีริทริทอล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559

## ERYTHRITOL (อีริทริทอล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## ERYTHROSINE (อีริโทเรซิน)

INS: 127      Synonym: CI Food Red 14; FD&C Red No. 3; C.I. (1975) No. 45430      Functional Class: Colour

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	200	54	2559
04.2.2.7	Fermented vegetable and seaweed products	30		2559
05.3	Chewing gum	50		2559
05.4	Decorations, toppings and sweet sauces	100		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	30	4,16,XS96,XS97	2559
08.3	Processed comminuted meat, poultry, and game products	30	4,290,XS88	2559

**ETHYL CELLULOSE (เอทิลเซลลูโลส)**

INS: 462      Synonym: Cellulose ethyl ether;  
Ethyl ether of cellulose      Functional Class: Bulking agent, Carrier, Glazing agent, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559

## ETHYL CELLULOSE (เอทิลเซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559

## ETHYL CELLULOSE (เอทิลเซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## ETHYL HYDROXYETHYL CELLULOSE (เอทิลไฮดรอกซีเอทิลเซลลูโลส)

INS: 467      Synonym: Ethyl hydroxyethyl cellulose; 2-hydroxyethyl ether of ethyl cellulose      Functional Class: Emulsifier, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559



## ETHYL HYDROXYETHYL CELLULOSE (เอทิลไฮดรอกซีเอทิลเซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559

## ETHYL HYDROXYETHYL CELLULOSE (เอทิลไฮดรอกซีเอทิลเซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## ETHYL MATOL (เอทิลมอลตัล)

INS: 637

Synonym: -

Functional Class: Flavour enhancer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.7	Dairy-based desserts	200		2559
03.0	Edible ices	200		2559
05.2	Confectionery including candy, nougats and marzipans	1000	XS309R	2561
05.3	Chewing gum	1000		2561

**ETHYLENE DIAMINE TETRA ACETATES (กลุ่มเอทิลีนไดอะมีนเทตระแอะซีเตด)**

INS: 385	Calcium disodium ethylenediaminetetraacetate (แคลเซียมไดโซเดียมเอทิลีนไดอะมีนเทตระแอะซีเตด) Synonym: Calcium disodium EDTA; Calcium disodium edetate	Functional Class: Antioxidant, Colour retention agent, Preservative, Sequestrant
INS: 386	Disodium ethylenediaminetetraacetate (ไดโซเดียมเอทิลีนไดอะมีนเทตระแอะซีเตด) Synonym: Disodium EDTA; Disodium edetate; Disodium dihydrogen ethylenediaminetetraacetate	Functional Class: Antioxidant, Colour retention agent, Preservative, Sequestrant, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	100	21	2559
04.1.2.2	Dried fruit	265	21	2559
04.1.2.3	Fruit in vinegar, oil, or brine	250	21	2559
04.1.2.5	Jams, jellies and marmalades	130	21	2559
04.1.2.6	Fruit-based spreads for spread or raw materials	100	21	2559
04.1.2.10	Fermented fruit products	250	21	2559
04.1.2.11	Fruit fillings	650	21	2559
04.2.2.1	Frozen vegetables, seaweeds, nuts and seeds	100	21,110	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	800	21,64,297	2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	250	21	2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	365	21	2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	250	21	2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	80	21	2559
04.2.2.7	Fermented vegetable and seaweed products	250	21	2559
04.2.2.8	Cooked or fried vegetables and seaweeds	250	21	2559

## ETHYLENE DIAMINE TETRA ACETATES (กลุ่มเอทิลีนไดแอมีนเทตระแอะซีเตต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	50	21,XS86	2559
06.5	Cereal and starch based desserts	315	21	2559
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	35	21,XS88, XS89,XS98	2559
09.2.1	Frozen fish, fish fillets, and fish products	75	21,392, XS36,XS92, XS95,XS165, XS190,XS191, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	75	21,XS166	2561
09.2.4.1	Cooked fish and fish products	50	21	2559
09.3.2	Pickled fish and fish products	250	21	2559
09.4	Fully preserved, including canned fish and fish products	340	21,310	2561
10.2.3	Dried and/or heat coagulated egg products	200	21,47	2559
11.6	Table-top sweeteners directly sold to consumers	1000	21,96	2559
12.2	Herbs, spices, seasonings, and condiments	70	21	2559
12.4	Mustards	75	21	2559
12.6.1	Emulsified sauces and dips	100	21	2559
12.6.2	Non-emulsified sauces	75	21	2559
12.7	Salads and sandwich spreads	100	21	2559
13.6	Food supplements	150	21	2559
14.1.4	Water-based flavoured drinks	35	21,127	2561
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	35	21,127	2559
14.2.1	Beer and malt beverages	25	21	2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	25	21	2559
14.2.7	Aromatized alcoholic beverages	25	21	2559

**FAST GREEN FCF (ฟาสต์ กรีน เอฟซีเอฟ)**

INS: 143

Synonym: CI Food Green 3; FD&amp;C

Functional Class: Colour

Green 3; CI (1975) No. 42053

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	70	52	2559
01.7	Dairy-based desserts	100	2	2559
02.1.3	Animal oils and fats	GMP		2559
02.4	Fat-based desserts	100		2559
03.0	Edible ices	100		2559
04.1.2.4	Canned or bottled fruit	200		2559
04.1.2.5	Jams, jellies and marmalades	400		2559
04.1.2.6	Fruit-based spreads for spread or raw materials	100		2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	100		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	100	182	2559
04.1.2.9	Fruit-based desserts	100		2559
04.1.2.11	Fruit fillings	100		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	300		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	200		2559
04.2.2.7	Fermented vegetable and seaweed products	100		2559
05.2	Confectionery including candy, nougats and marzipans	100	XS309R	2561
05.3	Chewing gum	300		2559
05.4	Decorations, toppings and sweet sauces	100		2559
06.4.3	Pre-cooked pastas and noodles and like products	290	194	2559
06.5	Cereal and starch based desserts	100		2559
07.0	Bakery wares	100		2559
08.1	Fresh meat, poultry, and game	100	3,4,16	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	100	3,4,XS96,XS97	2559
08.4	Edible casings	100	3,4	2559
09.2.4.1	Cooked fish and fish products	100		2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	100	XS311	2559

## FAST GREEN FCF (ฟาสต์ กรีน เอฟซีเอฟ)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.3.3	Caviar and other fish roe products	100		2559
09.4	Fully preserved, including canned fish and fish products	100	95	2559
10.1	Fresh eggs	GMP	4	2559
10.4	Egg-based desserts	100		2559
12.2.2	Seasonings and condiments	100		2559
12.6.1	Emulsified sauces and dips	100		2559
13.6	Food supplements	600		2559
14.1.4	Water-based flavoured drinks	100	127	2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	100		2559
14.2.7	Aromatized alcoholic beverages	100		2559

## FERRIC AMMONIUM CITRATE (เฟร์ริกแอมโมเนียมซิเตรต)

INS: 381	Synonym: Iron ammonium citrate; Ammonium ferric citrate; Ammonium iron citrate; Ammonium iron (III) citrate	Functional Class: Anticaking agent
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.4.3	Concentrates (liquid or solid form) for water-based flavoured drinks	10	23	2559

## FERROCYANIDES (กลุ่มเฟอร์โรไซยาไนด์)

INS: 535	Sodium ferrocyanide (โซเดียมเฟอร์โรไซยาไนด์) Synonym: Yellow prussiate of soda; Hexacyanoferrate of sodium; Sodium hexacyanoferrate (II)	Functional Class: Anticaking agent
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INS: 536	Potassium ferrocyanide (โพแทสเซียมเฟอร์โรไซยาไนด์) Synonym: Yellow prussiate of potash, Hexacyanoferrate of potassium; Potassium hexacyanoferrate (II)	Functional Class: Anticaking agent
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INS: 538	Calcium ferrocyanide (แคลเซียมเฟอร์โรไซยาไนด์) Synonym: Yellow prussiate of lime, Hexacyanoferrate of calcium; Calcium hexacyanoferrate (II)	Functional Class: Anticaking agent
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## FERROCYANIDES (กลุ่มเฟอร์โรไซยาไนด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.1.1	Salt	14	24,107	2559
12.1.2	Salt substitutes	20	24	2559
12.2.2	Seasonings and condiments	20	24	2559

## FERROUS GLUCONATE (เฟอรัสกลูโคเนต)

INS: 579      Synonym: Iron (II) di-D-gluconate      Functional Class: Colour retention agent  
 dihydrate; Ferrous gluconate

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	150	23,48	2559

## FERROUS LACTATE (เฟอรัสแล็กเตต)

INS: 585      Synonym: Ferrous lactate; Iron (II) lactate; Iron (II) 2-hydroxypropanoate      Functional Class: Colour retention agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	150	23,48	2559

## FUMARIC ACID (กรดฟูมาริก)

INS: 297      Synonym: trans-Butenedioic acid; trans-1,2-Ethylene-dicarboxylic acid      Functional Class: Acidity regulator

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559

## FUMARIC ACID (กรดฟูมาริก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	700		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559



## FUMARIC ACID (กรดฟูมาริก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41,XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4	Cooked and/or fried fish and fish products	GMP		2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	266,267	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559

## FUMARIC ACID (กรดฟูมาริก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## GELLAN GUM (เจลาแลนกัม)

INS: 418

Synonym: -

Functional Class: Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559

## GELLAN GUM (เจลาเลนกัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559

## GELLAN GUM (เจลาเลนกัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	XS36, XS92, XS95, XS165, XS190, XS191, XS292, XS312, XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559

## GELLAN GUM (เจลแลนกัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## GLUCONO DELTA-LACTONE (กลูโคโน เดลตา-แล็กโทน)

INS: 575	Synonym: Glucono-delta-lactone; Gluconolactone; delta-gluconolactone; GDL; D-Glucono-1,5-lactone, D-gluconic acid delta-lactone	Functional Class: Acidity regulator, Raising agent, Sequestrant		
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.6.6	Whey cheese	GMP		2559

## GLUCONO DELTA-LACTONE (กลูโคโน เดลตา-แล็กโทน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559

## GLUCONO DELTA-LACTONE (กลูโคโน เดลตา-แล็กโทน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	GMP	239	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559





## GLUCOSE OXIDASE (เอนไซม์กลูโคสออกซิเดส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559

## GLUCOSE OXIDASE (เอนไซม์กลูโคสออกซิเดส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## GLUTAMIC ACID, L(+)- (กรดแอสล(+)-กลูตามิก)

INS: 620

Synonym: Glutamic acid; L-(+)-  
Glutamic acid, L-2-Amino-  
pentanedioic acid; Lalpha-  
aminoglutaric acid

Functional Class: Flavour enhancer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559

## GLUTAMIC ACID, L(+)- (กรดแอสล(+)-กลูตามิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	100000		2559

## GLUTAMIC ACID, L(+)- (กรดแอสล(+)-กลูตามิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	100000		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## GLYCEROL (กลีเซอรอล)

INS: 422      Synonym: Glycerin; 1,2,3-Propanetriol;      Functional Class: Humectant, Thickener  
Trihydroxypropane

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559

## GLYCEROL (กลีเซอรอล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559

## GLYCEROL (กลีเซอรอล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41, XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559

## GLYCEROL (กลีเซอรอล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## GLYCEROL ESTER OF WOOD ROSIN (เอสเทอร์ของกลีเซอรอลจากวูดโรซิน)

INS: 445(iii)    Synonym: -    Functional Class: Emulsifier, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.1.2	Surface-treated fresh fruit	110		2559
04.2.1.2	Surface-treated fresh vegetables, seaweeds, nuts and seeds	110		2559
14.1.4	Water-based flavoured drinks	150	127	2559

## GLYCINE (ไกลซีน)

INS: 640    Synonym: -    Functional Class: Flavour enhancer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559

## GLYCINE (ไกลซีน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.6.6	Whey cheese	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559



## GLYCINE (ไกลซีน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	100000		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	100000		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**GRAPE SKIN EXTRACT (สารสกัดเปลือกองุ่น)**

INS: 163(ii)    Synonym: Enociana, Eno    Functional Class: Colour

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.7	Dairy-based desserts	200	181	2559
02.4	Fat-based desserts	200	181	2559
03.0	Edible ices	100	181	2559
04.1.2.5	Jams, jellies and marmalades	500	181	2559
04.1.2.6	Fruit-based spreads for spread or raw materials	500	181	2559
04.1.2.9	Fruit-based desserts	500	181	2559
04.1.2.11	Fruit fillings	500	181	2559
05.2.2	Soft candy and other desserts, excluding products of food categories 01.7, 02.4, 04.1.2.9 and 06.5	1700	181,XS309R	2561
05.3	Chewing gum	500	181	2559
05.4	Decorations, toppings and sweet sauces	500	181	2559
06.5	Cereal and starch based desserts	200	181	2559
08.1.2	Fresh meat, poultry and game, comminuted	1000	4,16,94	2559
09.2.2	Frozen battered fish, fish fillets and fish products	500	16,XS166	2561
09.2.3	Frozen minced and creamed fish products	500	16,95	2559
09.2.4.3	Fried fish and fish products	1000	16,95	2559
09.3.1	Fish and fish products marinated in vinegar or wine	500	16	2559
09.3.2	Pickled fish and fish products	1500	16	2559
10.1	Fresh eggs	1500	4	2559
10.4	Egg-based desserts	200	181	2559
13.6	Food supplements	500	181	2559
14.1.4	Water-based flavoured drinks	160	127,181,TH23	2561
14.2.2	Cider and perry	300	181	2559
14.2.4	Wines other than grape	300	181	2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	300	181	2559
14.2.7	Aromatized alcoholic beverages	300	181	2559
15.1	Snacks - potato, cereal, flour or starch based	500	181	2559
15.2	Snacks - Processed nut or flavoured processed seed based	300	181	2559
15.3	Snacks - fish based	400		2559



## GUANYLIC ACID, 5'- (กรด 5' กัวโนลิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	100000		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	100000		2559
12.7	Salads and sandwich spreads	GMP		2559

## GUANYLIC ACID, 5'- (กรด 5' กัวโนลิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## GUAR GUM (กัวร์กัม)

INS: 412      Synonym: Gum cyamopsis, Guar flour      Functional Class: Emulsifier, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559

## GUAR GUM (กัวร์กัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559

## GUAR GUM (กัวร์กัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	73,391, XS36,XS92, XS95,XS190, XS191,XS292, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	177	2559
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559

## GUAR GUM (กัวร์กัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	1000	14,72	2559
13.1.2	Follow-up formulae	1000	72	2559
13.1.3	Formulae for special medical purposes for infants	1000	14,72	2559
13.2	Complementary foods for infants and young children	2000	271,272	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559



**GUM ARABIC (กัมอะราบิก)**

INS: 414      Synonym: Gum arabic (Acacia senegal); Gum arabic (Acacia seyal); Acacia gum; Arabic gum      Functional Class: Bulking agent, Carrier, Emulsifier, Glazing agent, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559

## GUM ARABIC (กัมอะราบิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	16,XS36, XS92,XS95, XS165,XS190, XS191,XS292, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	16,XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4.1	Cooked fish and fish products	GMP	16,325	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	GMP	16	2559

## GUM ARABIC (กัมมะอาราบิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.4.3	Fried fish and fish products	GMP	41,325,332	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300,332	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	10000	239,273	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559

## GUM ARABIC (กัมอะราบิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## HEXAMETHYLENE TETRAMINE (เฮกซะเมทิลีนเททระมีน)

INS: 239      Synonym: Hexamine; Methenamine      Functional Class: Preservative

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.2.1	Ripened cheese, includes rind	25	66,298	2559

## HYDROCHLORIC ACID (กรดไฮโดรคลอริก)

INS: 507      Synonym: Muriatic acid      Functional Class: Acidity regulator

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559

## HYDROCHLORIC ACID (กรดไฮโดรคลอริก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559

## HYDROCHLORIC ACID (กรดไฮโดรคลอริก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	GMP	239	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## HYDROGENATED POLY-1-DECENES (ไฮโดรจิเนตต พอลิ-1-ดีซีเนส)

INS: 907      Synonym: Hydrogenated polydec-1-ene; Hydrogenated poly- $\alpha$ -olefin      Functional Class: Glazing agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.2.2	Dried fruit	2000		2559
05.2.2	Soft candy and other desserts, excluding products of food categories 01.7, 02.4, 04.1.2.9 and 06.5	2000	XS309R	2559

**HYDROXYBENZOATES, PARA- (กลุ่มพารา-ไฮดรอกซีเบนโซเอต)**

INS: 214 Ethyl para-hydroxybenzoate Functional Class: Preservative  
(เอทิลพารา-ไฮดรอกซีเบนโซเอต)  
Synonym: Ethylparaben; Ethyl  
p-oxybenzoate; Ethyl ester of  
p-hydroxybenzoic acid

INS: 218 Methyl para-hydroxybenzoate Functional Class: Preservative  
(เมทิลพารา-ไฮดรอกซีเบนโซเอต)  
Synonym: Methylparaben; Methyl  
p-oxybenzoate; Methyl ester of  
p-hydroxybenzoic acid

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.4	Processed cheese	300	27	2559
01.6.5	Cheese analogues	500	27	2559
01.7	Dairy-based desserts	120	27,TH4,TH5	2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	300	27	2559
02.3	Fat emulsions mainly of type oil-in- water	300	27	2559
04.1.2.2	Dried fruit	800	27	2559
04.1.2.3	Fruit in vinegar, oil, or brine	250	27	2559
04.1.2.5	Jams, jellies and marmalades	250	27	2559
04.1.2.6	Fruit-based spreads for spread or raw materials	1000	27	2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	1000	27	2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	800	27	2559
04.1.2.9	Fruit-based desserts	800	27	2559
04.1.2.10	Fermented fruit products	800	27	2559
04.1.2.11	Fruit fillings	800	27	2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	1000	27	2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	1000	27	2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	1000	27	2559
04.2.2.7	Fermented vegetable and seaweed products	300	27	2559

## HYDROXYBENZOATES, PARA- (กลุ่มพารา-ไฮดรอกซีเบนโซเอต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	300	27,XS86	2559
05.1.5	Imitation chocolate, chocolate substitute products	300	27	2559
05.2	Confectionery including candy, nougats and marzipans	1000	27,XS309R	2561
05.3	Chewing gum	1500	27	2559
05.4	Decorations, toppings and sweet sauces	300	27	2559
07.2	Fine bakery wares and mixes	300	27	2559
08.4	Edible casings	36	27	2559
09.3	Semi-preserved fish and fish products	1000	27	2559
11.4	Other sugars and syrups	100	27	2559
12.3	Vinegars	100	27	2559
12.4	Mustards	300	27	2559
12.6	Sauces and like products	1000	27	2559
14.1.4	Water-based flavoured drinks	250	27,127	2561
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	450	27,127,160	2559
14.2.2	Cider and perry	200	27	2559
14.2.4	Wines other than grape	200	27	2559
14.2.5	Mead	200	27	2559
14.2.7	Aromatized alcoholic beverages	1000	27,224	2559
15.1	Snacks - potato, cereal, flour or starch based	300	27	2559
15.2	Snacks - Processed nut or flavoured processed seed based	300	27	2559

## HYDROXYPROPYL CELLULOSE (ไฮดรอกซีโพรพิลเซลลูโลส)

INS: 463	Synonym: Cellulose hydroxypropyl ether; Modified cellulose; Hydroxypropyl ether of cellulose	Functional Class: Emulsifier, Foaming agent, Glazing agent, Stabilizer, Thickener
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559



## HYDROXYPROPYL CELLULOSE (ไฮดรอกซีโพรพิลเซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559

## HYDROXYPROPYL CELLULOSE (ไฮดรอกซีโพรพิลเซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	16,XS36, XS92,XS95, XS165,XS190, XS191,XS292, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	63,332	2559
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4.1	Cooked fish and fish products	GMP	16,325	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	GMP	16	2559
09.2.4.3	Fried fish and fish products	GMP	41,325,332	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300,332	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559

## HYDROXYPROPYL CELLULOSE (ไฮดรอกซีโพรพิลเซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## HYDROXYPROPYL DISTARCH PHOSPHATE (ไฮดรอกซีโพรพิลไดสตาร์ชฟอสเฟต)

INS: 1442      Synonym: -      Functional Class: Anticaking agent, Emulsifier,  
Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559

## HYDROXYPROPYL DISTARCH PHOSPHATE (ไฮดรอกซีโพรพิลไดสตาร์ชฟอสเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	10000		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559

## HYDROXYPROPYL DISTARCH PHOSPHATE (ไฮดรอกซีโพรพิลไดสตาร์ชฟอสเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	63	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559

## HYDROXYPROPYL DISTARCH PHOSPHATE (ไฮดรอกซีโพรพิลไดสตาร์ชฟอสเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## HYDROXYPROPYL METHYL CELLULOSE (ไฮดรอกซีโพรพิลเมทิลเซลลูโลส)

INS: 464      Synonym: 2-hydroxypropyl ether of methyl cellulose      Functional Class: Bulking agent, Emulsifier, Glazing agent, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559

## HYDROXYPROPYL METHYL CELLULOSE (ไฮดรอกซีโพรพิลเมทิลเซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559

## HYDROXYPROPYL METHYL CELLULOSE (ไฮดรอกซีโพรพิลเมทิลเซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	16,XS36, XS92,XS95, XS165,XS190, XS191,XS292, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	63,332	2559
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4.1	Cooked fish and fish products	GMP	16,325	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	GMP	16	2559
09.2.4.3	Fried fish and fish products	GMP	41,325,332	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300,332	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559



## HYDROXYPROPYL METHYL CELLULOSE (ไฮดรอกซีโพรพิลเมทิลเซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## HYDROXYPROPYL STARCH (ไฮดรอกซีโพรพิลสตาร์ช)

INS: 1440	Synonym: -	Functional Class: Emulsifier, Stabilizer, Thickener		
FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559

## HYDROXYPROPYL STARCH (ไฮดรอกซีโพรพิลสตาร์ช)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559

## HYDROXYPROPYL STARCH (ไฮดรอกซีโพรพิลสตาร์ช)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	XS36, XS92, XS95, XS165, XS190, XS191, XS292, XS312, XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	63	2559
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559

## HYDROXYPROPYL STARCH (ไฮดรอกซีโพรพิลสตาร์ช)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	5000	72,150,284,292	2559
13.1.3	Formulae for special medical purposes for infants	5000	72,150,292	2559
13.2	Complementary foods for infants and young children	60000	237,276	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## ICE STRUCTURING PROTEIN PRODUCED FROM GENETICALLY MODIFIED YEAST

(โปรตีนจับโครงสร้างน้ำแข็งผลิตจากยีสต์ดัดแปรพันธุกรรม)

INS: -      Synonym: Ice Structuring Protein type      Functional Class: Aids in stability of ice crystal  
 III HPLC 12; ISP Type III HPLC 12      structure

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.7	Dairy-based desserts	50	TH13	2559
02.4	Fat-based desserts	50	TH13	2559
03.0	Edible ices	50		2559



## INDIGOTINE (อินดิโกทีน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.1.1	Fresh fish	300	4,16,50	2559
09.2.1	Frozen fish, fish fillets, and fish products	300	95,XS36, XS92,XS95, XS165,XS190, XS191,XS292, XS312,XS315	2561
09.2.4.1	Cooked fish and fish products	300	95	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	250	16	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	300	22,XS311	2559
09.3.3	Caviar and other fish roe products	300		2559
09.3.4	Semi-preserved fish and fish products, excluding products of food categories 09.3.1 - 09.3.3	300		2559
09.4	Fully preserved, including canned fish and fish products	300		2559
10.1	Fresh eggs	300	4	2559
10.4	Egg-based desserts	300		2559
11.4	Other sugars and syrups	300		2559
12.2.2	Seasonings and condiments	300		2559
12.4	Mustards	300		2559
12.5	Soups and broths	50		2559
12.6	Sauces and like products	300		2559
13.3	Dietetic foods intended for special medical purposes	50		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	50		2559
13.5	Dietetic foods	300		2559
13.6	Food supplements	300		2559
14.1.4	Water-based flavoured drinks	100	127	2559
14.2.2	Cider and perry	200		2559
14.2.4	Wines other than grape	200		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	300		2559
14.2.7	Aromatized alcoholic beverages	200		2559
15.1	Snacks - potato, cereal, flour or starch based	200		2559
15.2	Snacks - Processed nut or flavoured processed seed based	100		2559

**INOSINIC ACID, 5'- (กรด 5' ไอโนซินิก)**

INS: 630      Synonym: Inosinic acid; IMP; Inosine-5'-monophosphoric acid      Functional Class: Flavour enhancer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559

## INOSINIC ACID, 5'- (กรด 5' ไนโนซินิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	100000		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	100000		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559



## INOSINIC ACID, 5'- (กรด 5' ไนโนซีนิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## IRON OXIDES (กลุ่มไอรอนออกไซด์)

INS: 172(i)	Iron oxide, black (ไอรอนออกไซด์, สีดำ) Synonym: CI Pigment Black 11; CI (1975) No. 77499; Ferroso ferric oxide; Iron (II,III) oxide	Functional Class: Colour		
INS: 172(ii)	Iron oxide, red (ไอรอนออกไซด์, สีแดง) Synonym: CI Pigment Red 101 and 102; CI (1975) No. 77491; Iron sesquioxide, Anhydrous ferric oxide, Anhydrous iron (III) oxide	Functional Class: Colour		
INS: 172(iii)	Iron oxide, yellow (ไอรอนออกไซด์, สีเหลือง) Synonym: CI Pigment Yellow 42 and 43; CI (1975) No. 77492; Hydrated ferric oxide, Hydrated iron (III) oxide	Functional Class: Colour		

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.4	Decorations, toppings and sweet sauces	100		2559
13.6	Food supplements	7500	3	2561

## ISOPROPYL CITRATES (ไอโซโพรพิลซิเตรต)

INS: 384	Synonym: Citric acid mixed ester of 2- propanol	Functional Class: Antioxidant, Preservative, Sequestrant		
FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.1.2	Vegetable oils and fats	200		2559

## ISOPROPYL CITRATES (ไอโซโพรพิลซิติเรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.1.3	Animal oils and fats	200		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	100		2559
08.1.2	Fresh meat, poultry and game, comminuted	200		2559
08.2.1.2	Cured (including salted) and dried non-heat treated processed meat, poultry, and game products in whole pieces or cuts	200		2559
08.3.1.2	Cured (including salted) and dried non-heat treated processed comminuted meat, poultry, and game products	200		2559
14.1.4	Water-based flavoured drinks	200	127	2559

## ISOMALT (ไอโซมอลต์)

INS: 953      Synonym: Hydrogenated isomaltulose      Functional Class: Anticaking agent, Bulking agent, Glazing agent, Stabilizer, Sweetener, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559

## ISOMALT (ไอโซมอลต์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559

## ISOMALT (ไอโซมอลต์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## KARAYA GUM (คารายากัม)

INS: 416      Synonym: Karaya; Gum karaya;      Functional Class: Emulsifier, Stabilizer, Thickener  
*Sterculia*; Gum *sterculia*;  
 Kadaya; Katilo; Kullo; Kuterra

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat- treated after fermentation	200	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559

## KARAYA GUM (คารายากัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559

## KARAYA GUM (คารายากัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	XS36, XS92, XS95, XS165, XS190, XS191, XS292, XS312, XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559

## KARAYA GUM (คารายากัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## KONJAC FLOUR (แป้งหัวบุก)

INS: 425      Synonym: Konjac mannan; Konjac;  
Konnyaku      Functional Class: Carrier, Emulsifier, Gelling agent,  
Glazing agent, Humectant, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat- treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559

## KONJAC FLOUR (แป้งหัวบุก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP	236	2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559



## KONJAC FLOUR (แป้งหัวบุก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	16,XS36, XS92,XS95, XS165,XS190, XS191,XS292, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41,325,332, XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.4.1	Cooked fish and fish products	GMP	16,325	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	GMP	16	2559
09.2.4.3	Fried fish and fish products	GMP	41,325,332	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300,332	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559

## KONJAC FLOUR (แป้งหัวบุก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**LACTIC ACID, L-, D- and DL- (กรดแลคติก-, ดี-, และ ดีแอล-แล็กติก)**

INS: 270      Synonym: 2-Hydroxypropanoic acid;      Functional Class: Acidity regulator  
 2-Hydroxypropionic acid

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP		2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.6.6	Whey cheese	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.1.1	Untreated fresh vegetables, seaweeds, nuts and seeds	GMP	262,264	2559
04.2.2.1	Frozen vegetables, seaweeds, nuts and seeds	GMP	262,264	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559

## LACTIC ACID, L-, D- and DL- (กรดแลค-, ดี-, และ ดีแอล-แล็กติก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559

## LACTIC ACID, L-, D- and DL- (กรดแลค-, ดี-, และ ดีแอล-แล็กติก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	GMP	72,83	2559
13.1.2	Follow-up formulae	GMP	72,83	2559
13.1.3	Formulae for special medical purposes for infants	GMP	72,83	2559
13.2	Complementary foods for infants and young children	2000	83,238	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## LACTIC AND FATTY ACID ESTERS OF GLYCEROL (เอสเทอร์ของกลีเซอรอลของกรดแล็กติกและกรดไขมัน)

INS: 472b      Synonym: Lactic acid esters of mono- and diglycerides; lactoglycerides      Functional Class: Emulsifier, Sequestrant, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559

## LACTIC AND FATTY ACID ESTERS OF GLYCEROL (เอสเทอร์ของกลีเซอรอลของกรดแล็กติกและกรดไขมัน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559

## LACTIC AND FATTY ACID ESTERS OF GLYCEROL (เอสเทอร์ของกลีเซอรอลของกรดแล็กติกและกรดไขมัน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	29	2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	16,29	2559
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559

## LACTIC AND FATTY ACID ESTERS OF GLYCEROL (เอสเทอร์ของกลีเซอรอลของกรดแล็กติกและกรดไขมัน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	5000	239,268	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559



**LACTITOL (แล็กทิทอล)**

INS: 966      Synonym: Lactit, lactositol, lactobiosit      Functional Class: Emulsifier, Sweetener, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559

## LACTITOL (แล็กทิทอล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559

## LACTITOL (แล็กทิทอล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## LAURIC ARGINATE ETHYL ESTER (ลอริกอาร์จินेटเอทิลเอสเทอร์)

INS: 243      Synonym: Lauric arginate ethyl ester;      Functional Class: Preservative  
 lauramide arginine ethyl ester;  
 LAE

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.1	Unripened cheese	200		2559
01.6.2.1	Ripened cheese, includes rind	200		2559
01.6.3	Whey cheese	200		2559
01.6.4	Processed cheese	200		2559
01.6.5	Cheese analogues	200		2559
01.7	Dairy-based desserts	200	170,TH4,TH5	2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	200	214,215	2559
04.1.2.2	Dried fruit	200		2559
04.1.2.11	Fruit fillings	200		2559
04.2.1.2	Surface-treated fresh vegetables, seaweeds, nuts and seeds	200		2559
04.2.1.3	Peeled, cut or shredded fresh vegetables, seaweeds, nuts and seeds	200		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	200		2559
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	200	XS86	2559
05.3	Chewing gum	225		2559
06.5	Cereal and starch based desserts	200		2559
08.2.1	Non-heat treated processed meat, poultry, and game products in whole pieces or cuts	200		2559

## LAURIC ARGINATE ETHYL ESTER (ลอริกอาร์จินेटเอทิลเอสเทอร์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.2.2	Heat-treated processed meat, poultry, and game products in whole pieces or cuts	200	XS96, XS97	2559
08.2.3	Frozen processed meat, poultry and game products in whole pieces or cuts	200	3,374	2559
08.3.1	Non-heat treated processed comminuted meat, poultry, and game products	315		2559
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	200	XS88, XS89, XS98	2559
08.3.3	Frozen processed comminuted meat, poultry, and game products	315	3,374	2559
10.2	Egg products	200		2559
10.4	Egg-based desserts	200		2559
12.2.2	Seasonings and condiments	200		2559
12.5	Soups and broths	200	XS117, TH6	2559
12.6.1	Emulsified sauces and dips	200		2559
12.6.2	Non-emulsified sauces	200		2559
12.7	Salads and sandwich spreads	200		2559
14.1.4.1	Carbonated water-based flavoured drinks	50		2559
14.1.4.2	Non-carbonated water-based flavoured drinks	50		2559
14.1.4.3	Concentrates (liquid or solid form) for water-based flavoured drinks	50	127	2559

## L-CYSTEINE HYDROCHLORIDE (แอล-ซิสเทอีนไฮโดรคลอไรด์)

INS: 920	Synonym: L-2-Amino-3-mercaptopropanoic acid Monohydrochloride; L-Cysteine monohydrochloride	Functional Class: Flour treatment agent
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.2.1	Flours	90		2559
07.0	Bakery wares	90		2559

**LECITHIN (เลซิทิน)**INS: 322(i)    Synonym: Phosphatides;  
Phospholipids

Functional Class: Antioxidant, Emulsifier

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559

## LECITHIN (เลซิทิน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.2.1	Flours	GMP	25,28	2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.1.2	Fresh molluscs, crustaceans, and echinoderms	GMP	390,XS312, XS315	2561
09.2.1	Frozen fish, fish fillets, and fish products	GMP	392,XS36, XS92,XS95, XS165,XS190, XS191,XS312, XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	63	2559
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559

## LECITHIN (เลซิทิน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	5000	72	2559
13.1.2	Follow-up formulae	5000	72	2559
13.1.3	Formulae for special medical purposes for infants	5000	72	2559
13.2	Complementary foods for infants and young children	5000	271,274	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559

## LECITHIN (เลซิทิน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## LIPASES (เอนไซม์ไลเปส)

INS: 1104      Synonym: Lipase; Triglycerin lipase;      Functional Class: Flavour enhancer  
 Tributyrase, Lipase from Animal

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559



## LIPASES (เอนไซม์ไลเปส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	ผลิตภัณฑ์เนื้อสัตว์ทั้งชิ้นหรือตัดแต่งและผ่านกรรมวิธี	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	100000		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559

## LIPASES (เอนไซม์ไลเปส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	100000		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**Lutein, *Tagetes erecta* L. (ลูทีนจากดอกดาวเรือง)**

INS: 161b(i)    Synonym: Vegetable lutein; Vegetable luteol; Bo-Xan (lutein)    Functional Class: Colour

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	75	TH14	2559
01.7	Dairy-based desserts	75	TH15	2559
14.1.4	Water-based flavoured drinks	40	127	2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	40	127	2559

LYCOPENE, *Blakeslea trispora* (ไลโคพีนจากรา บลาเคสเลีย ไทรสปอรา)

INS: 160d(iii)    Synonym: -

Functional Class: Colour

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559

LYCOPENE, *Blakeslea trispora* (ไลโคพีนจากกรา บลาเคสเลีย ไทรสปอรา)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559

LYCOPENE, *Blakeslea trispora* (ไลโคพีนจากกรา บลาเคสเลีย ไทรสปอรา)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## LYCOPENE, SYNTHETIC (ไลโคพีนสังเคราะห์)

INS: 160d(i)    Synonym: -    Functional Class: Colour

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	เครื่องดื่มที่มีนมเป็นส่วนประกอบหลัก	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559

## LYCOPENE, SYNTHETIC (ไลโคพีนสังเคราะห์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559

## LYCOPENE, SYNTHETIC (ไลโคพีนสังเคราะห์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## LYCOPENE, TOMATO (ไลโคพีนจากมะเขือเทศ)

INS: 160d(ii)    Synonym: Lycopene (tomato)    Functional Class: Colour

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559

## LYCOPENE, TOMATO (ไลโคปีนจากมะเขือเทศ)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559



## LYCOPENE, TOMATO (ไลโคปีนจากมะเขือเทศ)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## LYSOZYME (ไลโซไซม์)

INS: 1105    Synonym: Lysozyme hydrochloride    Functional Class: Preservative

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.2	Ripened cheese	GMP		2559
14.2.2	Cider and perry	500		2559
14.2.3	Grape wines	500		2559

**MAGNESIUM CARBONATE (แมกนีเซียมคาร์บอเนต)**

INS: 504(i)    Synonym: -

Functional Class: Acidity regulator, Anticaking agent, Colour retention agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.3	Fluid Buttermilk (plain)	GMP	261	2559
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	10000		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	5000	36	2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559

## MAGNESIUM CARBONATE (แมกนีเซียมคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	16,XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4	Cooked and/or fried fish and fish products	GMP		2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	266,267,333	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.1.2	Powdered sugar, powdered dextrose	15000	56	2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.1	Salt	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559

## MAGNESIUM CARBONATE (แมกนีเซียมคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## MAGNESIUM CHLORIDE (แมกนีเซียมคลอไรด์)

INS: 511      Synonym: Magnesium chloride hexahydrate      Functional Class: Colour retention agent, Firming agent, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559

## MAGNESIUM CHLORIDE (แมกนีเซียมคลอไรด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559

## MAGNESIUM CHLORIDE (แมกนีเซียมคลอไรด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	XS36,XS92, XS95,XS165, XS190,XS191, XS292,XS312, XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559

## MAGNESIUM CHLORIDE (แมกนีเซียมคลอไรด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## MAGNESIUM di-L-GLUTAMATE (แมกนีเซียมได-แอล-กลูตาเมต)

INS: 625      Synonym: Magnesium glutamate;      Functional Class: Flavour enhancer  
 Monomagnesium di-L-  
 glutamate tetrahydrate

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559

## MAGNESIUM di-L-GLUTAMATE (แมกนีเซียมดี-แอล-กลูตาเมต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559



## MAGNESIUM di-L-GLUTAMATE (แมกนีเซียมดี-แอล-กลูตาเมต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	100000		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	100000		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**MAGNESIUM GLUCONATE (แมกนีเซียมกลูโคเนต)**

INS: 580

Synonym: Magnesium di-D-gluconate

Functional Class: Acidity regulator, Firming agent,  
Flavour enhancer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559

## MAGNESIUM GLUCONATE (แมกนีเซียมกลูโคเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559

## MAGNESIUM GLUCONATE (แมกนีเซียมกลูโคเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## MAGNESIUM HYDROXIDE (แมกนีเซียมไฮดรอกไซด์)

INS: 528

Synonym: -

Functional Class: Acidity regulator, Colour  
retention agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.3	Fluid Buttermilk (plain)	GMP	261	2559
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559

## MAGNESIUM HYDROXIDE (แมกนีเซียมไฮดรอกไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	16,XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4	Cooked and/or fried fish and fish products	GMP		2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	266,267	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559

## MAGNESIUM HYDROXIDE (แมกนีเซียมไฮดรอกไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**MAGNESIUM HYDROXIDE CARBONATE (แมกนีเซียมไฮดรอกไซด์คาร์บอเนต)**

INS: 504(ii)	Synonym: Magnesium subcarbonate (light or heavy); Hydrated basic magnesium carbonate; Magnesium carbonate hydroxide; Magnesium carbonate hydroxide hydrated	Functional Class: Acidity regulator, Anticaking agent, Carrier, Colour retention agent
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.3	Fluid Buttermilk (plain)	GMP	261	2559
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559

## MAGNESIUM HYDROXIDE CARBONATE (แมกนีเซียมไฮดรอกไซด์คาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	16, XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4	Cooked and/or fried fish and fish products	GMP		2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	266,267	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559



## MAGNESIUM HYDROXIDE CARBONATE (แมกนีเซียมไฮดรอกไซด์คาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## MAGNESIUM DL-LACTATE (แมกนีเซียมดีแลคเตท)

INS: 329	Synonym: DL-Lactic acid magnesium salt, Magnesium di-DL-lactate; Magnesium DL(-)-2- hydroxypropionate	Functional Class: Acidity regulator, Flour treatment agent		
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559

## MAGNESIUM DL-LACTATE (แมกนีเซียมดีแลคเตท)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559

## MAGNESIUM DL-LACTATE (แมกนีเซียมดีแลคเตท)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**MAGNESIUM OXIDE (แมกนีเซียมออกไซด์)**

INS: 530

Synonym: -

Functional Class: Acidity regulator, Anticaking agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	10000		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559

## MAGNESIUM OXIDE (แมกนีเซียมออกไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.1	Salt	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559

## MAGNESIUM OXIDE (แมกนีเซียมออกไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## MAGNESIUM SILICATE, SYNTHETIC (แมกนีเซียมซิลิเกตสังเคราะห์)

INS: 553(i)    Synonym: Magnesium silicate    Functional Class: Anticaking agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	10000		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559

## MAGNESIUM SILICATE, SYNTHETIC (แมกนีเซียมซิลิเกตสังเคราะห์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.1.2	Powdered sugar, powdered dextrose	15000	56	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.1	Salt	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559

## MAGNESIUM SILICATE, SYNTHETIC (แมกนีเซียมซิลิเกตสังเคราะห์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## MAGNESIUM STEARATE (แมกนีเซียมสเตียเรต)

INS: 470(iii)    Synonym: Magnesium distearate;    Functional Class: Anticaking agent, Emulsifier, Dibasic magnesium stearate    Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559



## MAGNESIUM STEARATE (แมกนีเซียมสเตียเรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559

## MAGNESIUM STEARATE (แมกนีเซียมสเตียเรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## MAGNESIUM SULFATE (แมกนีเซียมซัลเฟต)

INS: 518      Synonym: Epsom salt (heptahydrate)      Functional Class: Firming agent, Flavour enhancer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559

## MAGNESIUM SULFATE (แมกนีเซียมซัลเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559

## MAGNESIUM SULFATE (แมกนีเซียมซัลเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559

## MAGNESIUM SULFATE (แมกนีเซียมซัลเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## MALIC ACID, DL- (กรดดีแอล-มาลิก)

INS: 296      Synonym: 2-Hydroxybutanedioic acid; Hydroxysuccinic acid; dl-Malic acid      Functional Class: Acidity regulator

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.6.6	Whey cheese	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.1	Frozen vegetables, seaweeds, nuts and seeds	GMP	265	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559

## MALIC ACID, DL- (กรดดีแอล-มาลิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41,XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4	Cooked and/or fried fish and fish products	GMP		2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	266,267	2559
09.3	Semi-preserved fish and fish products	GMP		2559

## MALIC ACID, DL- (กรดดีแอล-มาลิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	GMP	239	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.2.1	Fruit juice	GMP	115	2559
14.1.2.2	Vegetable juice	GMP		2559
14.1.2.3	Concentrates for fruit juice	GMP	115,127	2559
14.1.2.4	Concentrates for vegetable juice	GMP		2559
14.1.3.1	Fruit nectar	GMP		2559
14.1.3.2	Vegetable nectar	GMP		2559
14.1.3.3	Concentrates for fruit nectar	GMP	127	2559
14.1.3.4	Concentrates for vegetable nectar	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559

## MALIC ACID, DL- (กรดดีแอล-มาลิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## MALTITOL (มัลติทอล)

INS: 965(i)	Synonym: D-Maltitol; Hydrogenated maltose	Functional Class: Bulking agent, Emulsifier, Humectant, Stabilizer, Sweetener, Thickener
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559



## MALTITOL (มัลติทอล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559

## MALTITOL (มัลติทอล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## MALTITOL SYRUP (มัลติทอลไซรัป)

INS: 965(ii)	Synonym: Hydrogenated high maltose-content glucose syrup; Hydrogenated glucose syrup; Dried maltitol syrup; Maltitol syrup powder	Functional Class: Bulking agent, Emulsifier, Humectant, Stabilizer, Sweetener, Thickener		
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559

## MALTITOL SYRUP (มัลติทอลไซรัป)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559

## MALTITOL SYRUP (มัลติทอลไซรัป)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**MALTODEXTRIN (มอลโทเดกซ์ทรีน)**

INS: -

Synonym: -

Functional Class: Carrier, Emulsifier,  
Stabilizer, Thickener, Bulking agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559

## MALTODEXTRIN (มอลโทเดกซ์ทริน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1	Infant formulae, follow-on formulae, and formulae for special medical purposes for infants	GMP		2561
13.2	Complementary foods for infants and young children	GMP		2561
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559

**MALTODEXTRIN (มอลโทเดกซ์ทริน)**

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**MALTOL (มอลทอล)**

INS: 636      Synonym: -      Functional Class: Flavour enhancer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.7	Dairy-based desserts	200		2559
03.0	Edible ices	200		2559
05.2	Confectionery including candy, nougats and marzipans	150	XS309R	2561
05.3	Chewing gum	150		2561

**MANNITOL (แมนนิทอล)**

INS: 421      Synonym: D-Mannitol; Mannite      Functional Class: Anticaking agent, Bulking agent, Humectant, Stabilizer, Sweetener, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559

## MANNITOL (แมนนิทอล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559



## MANNITOL (แมนนิทอล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.1	Frozen fish, fish fillets, and fish products	GMP	XS36,XS92, XS95,XS165, XS190,XS191, XS292,XS312, XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559

## MANNITOL (แมนนิทอล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## METHYL CELLULOSE (เมทิลเซลลูโลส)

INS: 461      Synonym: Cellulose methyl ether;  
Methyl ether of cellulose      Functional Class: Bulking agent, Emulsifier,  
Glazing agent, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559

## METHYL CELLULOSE (เมทิลเซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559

## METHYL CELLULOSE (เมทิลเซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.1	Frozen fish, fish fillets, and fish products	GMP	332,391,XS36, XS92,XS95, XS190,XS191, XS292,XS312, XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	177,332	2559
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4.1	Cooked fish and fish products	GMP	16,325	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	GMP	16	2559
09.2.4.3	Fried fish and fish products	GMP	41,325,332	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300,332	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559

## METHYL CELLULOSE (เมทิลเซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## METHYL ETHYL CELLULOSE (เมทิลเอทิลเซลลูโลส)

INS: 465      Synonym: MEC; Ethyl methyl ether of cellulose      Functional Class: Emulsifier, Foaming agent, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559

## METHYL ETHYL CELLULOSE (เมทิลเอทิลเซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559

## METHYL ETHYL CELLULOSE (เมทิลเอทิลเซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	XS36,XS92,XS95, XS165,XS190, XS191,XS292, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	63	2559
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559

## METHYL ETHYL CELLULOSE (เมทิลเอทิลเซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## MICROCRYSTALLINE CELLULOSE (ไมโครคริสตัลไลน์เซลลูโลส)

INS: 460(i)    Synonym: Cellulose gel; Cellulose    Functional Class: Anticaking agent, Bulking agent, Carrier, Emulsifier, Foaming agent, Glazing agent, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559



## MICROCRYSTALLINE CELLULOSE (ไมโครคริสตัลไลน์เซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	10000		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559

## MICROCRYSTALLINE CELLULOSE (ไมโครคริสตัลไลน์เซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	16,XS36, XS92,XS95, XS165,XS190, XS191,XS292, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41,325,332, XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.4.1	Cooked fish and fish products	GMP	16,325	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	GMP	16	2559
09.2.4.3	Fried fish and fish products	GMP	41,325,332	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300,332	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.2	Brown sugar	GMP		2559

## MICROCRYSTALLINE CELLULOSE (ไมโครคริสตัลไลน์เซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**MICROCRYSTALLINE WAX (ไมโครคริสตัลไลน์แว็กซ์)**

INS: 905c(i)    Synonym: Petroleum wax    Functional Class: Foaming agent, Glazing agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.2.2	Rind of ripened cheese	30000		2559
04.1.1.2	Surface-treated fresh fruit	50		2559
04.2.1.2	Surface-treated fresh vegetables, seaweeds, nuts and seeds	50		2559
05.2	Confectionery including candy, nougats and marzipans	GMP	3,XS309R	2561
05.3	Chewing gum	20000	3	2559

**MINERAL OIL, HIGH VISCOSITY (น้ำมันแร่ชนิดความหนืดสูง)**

INS: 905d    Synonym: Liquid paraffin; Liquid petrolatum; Food grade mineral oil; White mineral oil    Functional Class: Foaming agent, Glazing agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.2.2	Dried fruit	5000		2559
05.1	Cocoa products and chocolate products including imitations and chocolate substitutes	2000	3,XS86,XS87, XS105,XS141	2559
05.2	Confectionery including candy, nougats and marzipans	2000	3,XS309R	2561
05.3	Chewing gum	20000		2559
05.4	Decorations, toppings and sweet sauces	2000	3	2559
06.1	Whole, broken, or flaked cereals and grains	800	98	2559
07.0	Bakery wares	3000	125	2559
08.2.3	Frozen processed meat, poultry and game products in whole pieces or cuts	950	3	2559
08.3.3	Frozen processed comminuted meat, poultry, and game products	950	3	2559

**MINERAL OIL, MEDIUM VISCOSITY (น้ำมันแร่ชนิดความหนืดปานกลาง)**

INS: 905e      Synonym: Liquid paraffin; Liquid petrolatum; Food grade mineral oil; White mineral oil      Functional Class: Glazing agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.2.2	Dried fruit	5000		2559
05.0	Confectionery	2000	3,XS86, XS87,XS105, XS309R,XS141	2561
07.1.1	Breads and rolls	3000	36,126	2559

**MONO- AND DI-GLYCERIDES OF FATTY ACIDS (มอนและไดกลีเซอไรด์ของกรดไขมัน)**

INS: 471      Synonym: Glyceryl monostearate; Glyceryl monopalmitate; Glyceryl monooleate, etc; Monostearin; Monopalmitin; Monoolein, etc.; GMS (for glyceryl monostearate)      Functional Class: Foaming agent, Emulsifier, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559

## MONO- AND DI-GLYCERIDES OF FATTY ACIDS (มอนและไดกลีเซอไรต์ของกรดไขมัน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559

## MONO- AND DI-GLYCERIDES OF FATTY ACIDS (มอนและไดกลีเซอไรต์ของกรดไขมัน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41	2559
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	4000	72	2559

## MONO- AND DI-GLYCERIDES OF FATTY ACIDS (มอนและไดกลีเซอไรต์ของกรดไขมัน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.1.2	Follow-up formulae	4000	72	2559
13.1.3	Formulae for special medical purposes for infants	4000	72	2559
13.2	Complementary foods for infants and young children	5000	268,275	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## MONOAMMONIUM L-GLUTAMATE (มอนแอมโมเนียมแอล-กลูตาเมต)

INS: 624      Synonym: Ammonium glutamate;      Functional Class: Flavour enhancer  
 Monoammonium L-glutamate monohydrate

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559



## MONOAMMONIUM L-GLUTAMATE (มอนอแอมโมเนียมแอล-กลูตาเมต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1	Fresh meat, poultry, and game	GMP	16	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559

## MONOAMMONIUM L-GLUTAMATE (มอนอแอมโมเนียมแอล-กลูตาเมต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	100000		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	100000		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**MONOPOTASSIUM L-GLUTAMATE (มอนิโพแทสเซียมแอล-กลูตาเมต)**

INS: 622      Synonym: Potassium glutamate, MPG;      Functional Class: Flavour enhancer

Monopotassium L-glutamate  
monohydrate

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559

## MONOPOTASSIUM L-GLUTAMATE (มอนิโพแทสเซียมแอล-กลูตาเมต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	100000		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	100000		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559

**MONOPOTASSIUM L-GLUTAMATE (มอนิโพแทสเซียมแอล-กลูตาเมต)**

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**MONOPOTASSIUM TARTRATES (มอนิโพแทสเซียมทาร์เตรต)**

INS: 336(i)    Synonym: Cream of tartar; Potassium acid tartrate; Potassium bitartrate    Functional Class: Acidity regulator

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
07.0	Bakery wares	5000	45	2559
14.1.2.1	Fruit juice	4000	45	2559
14.1.2.3	Concentrates for fruit juice	4000	45	2559
14.1.3.1	Fruit nectar	4000	45	2559
14.1.3.3	Concentrates for fruit nectar	4000	45	2559

**MONOSODIUM L-GLUTAMATE (มอนิโซเดียมแอล-กลูตาเมต)**

INS: 621    Synonym: Sodium glutamate; MSG; Monosodium L-glutamate monohydrate; Glutamic acid monosodium salt monohydrate    Functional Class: Flavour enhancer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559

## MONOSODIUM L-GLUTAMATE (มอนโซเดียมแอล-กลูตาเมต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.1	Frozen vegetables, seaweeds, nuts and seeds	GMP	201	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP	279	2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559

## MONOSODIUM L-GLUTAMATE (มอนโซเดียมแอล-กลูตาเมต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1	Fresh meat, poultry, and game	GMP	16	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	95	2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41	2559
09.2.3	Frozen minced and creamed fish products	GMP	311	2559
09.2.4	Cooked and/or fried fish and fish products	GMP	312	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	29,313	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	100000		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	100000		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559

## MONOSODIUM L-GLUTAMATE (มอนโซเดียมแอล-กลูตาเมต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	201	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## MONOSTARCH PHOSPHATE (มอนสตาร์ชฟอสเฟต)

INS: 1410    Synonym: -    Functional Class: Emulsifier, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559



## MONOSTARCH PHOSPHATE (มอนอสตาร์ชฟอสเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559

## MONOSTARCH PHOSPHATE (มอนอสตาร์ชฟอสเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	63	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	50000	239,269	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559

## MONOSTARCH PHOSPHATE (มอนอสตาร์ชฟอสเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## NATAMYCIN (นาทาไมซิน)

INS: 235      Synonym: Pimaricin      Functional Class: Preservative

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.1	Unripened cheese	40	3,80	2559
01.6.2	Ripened cheese	40	3,80	2559
01.6.4	Processed cheese	40	3,80	2559
01.6.5	Cheese analogues	40	3,80	2559
01.6.6	Whey cheese	40	3,80	2559
08.2.1.2	Cured (including salted) and dried non-heat treated processed meat, poultry, and game products in whole pieces or cuts	6		2559
08.3.1.2	Cured (including salted) and dried non-heat treated processed comminuted meat, poultry, and game products	20	3,81	2559

## NEOTAME (นีโอแทม)

INS: 961      Synonym: -      Functional Class: Flavour enhancer, Sweetener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	20	TH1	2559
01.3.2	Beverage whiteners	65		2559
01.4.4	Cream analogues	33		2559
01.5.2	Milk and cream powder analogues	65		2559

## NEOTAME (นีโอแทม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.5	Cheese analogues	33		2559
01.7	Dairy-based desserts	100		2559
02.3	Fat emulsions mainly of type oil-in-water	10		2559
02.4	Fat-based desserts	100		2559
03.0	Edible ices	100		2559
04.1.2.1	Frozen fruit	100		2559
04.1.2.2	Dried fruit	100		2559
04.1.2.3	Fruit in vinegar, oil, or brine	100		2559
04.1.2.4	Canned or bottled fruit	33		2559
04.1.2.6	Fruit-based spreads for spread or raw materials	70		2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	65		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	100		2559
04.1.2.9	Fruit-based desserts	100		2559
04.1.2.10	Fermented fruit products	65		2559
04.1.2.11	Fruit fillings	100		2559
04.1.2.12	Cooked fruit	65		2559
04.2.2.1	Frozen vegetables, seaweeds, nuts and seeds	33		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	33		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	10	144	2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	33		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	33		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	33		2559
04.2.2.7	Fermented vegetable and seaweed products	33		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	33		2559
05.1.2	Cocoa mixes (syrups)	33	97	2559

## NEOTAME (นีโอแทม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	100	XS86	2559
05.1.4	Cocoa and chocolate products	80	XS87,TH2	2561
05.1.5	Imitation chocolate, chocolate substitute products	100		2559
05.2	Confectionery including candy, nougats and marzipans	330	158,XS309R	2561
05.3	Chewing gum	1000		2559
05.4	Decorations, toppings and sweet sauces	100		2559
06.3	Breakfast cereals	160		2559
06.5	Cereal and starch based desserts	33		2559
07.1	Bread and ordinary bakery wares and mixes	70		2559
07.2	Fine bakery wares and mixes	80	165	2559
09.3	Semi-preserved fish and fish products	10		2559
09.4	Fully preserved, including canned fish and fish products	10		2559
10.4	Egg-based desserts	100		2559
11.4	Other sugars and syrups	70	159	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2	Herbs, spices, seasonings, and condiments	32		2559
12.3	Vinegars	12		2559
12.4	Mustards	12		2559
12.5	Soups and broths	20	XS117	2559
12.6.1	Emulsified sauces and dips	65		2559
12.6.2	Non-emulsified sauces	70		2559
12.6.3	Mixes for sauces and gravies	12		2559
12.6.4	Clear sauces	12		2559
12.7	Salads and sandwich spreads	33	166	2559
13.3	Dietetic foods intended for special medical purposes	33		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	33		2559
13.5	Dietetic foods	65		2559
13.6	Food supplements	90		2559
14.1.3.2	Vegetable nectar	65		2559

## NEOTAME (นีโอแทม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.3.4	Concentrates for vegetable nectar	65	127	2559
14.1.4	Water-based flavoured drinks	33	127,TH3	2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	50	127,160	2559
14.2.7	Aromatized alcoholic beverages	33		2559
15.0	Ready-to-eat savouries	32		2559

## NISIN (ไนซิน)

INS: 234	Synonym: -	Functional Class: Preservative		
FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.4.3	Clotted cream (plain)	10		2559
01.6.1	Unripened cheese	12.5	233	2559
01.6.2	Ripened cheese	12.5		2559
01.6.5	Cheese analogues	12.5		2559
01.6.6	Whey cheese	12.5		2559
01.7	Dairy-based desserts	12.5	233,362	2559
06.5	Cereal and starch based desserts	3		2559
07.2	Fine bakery wares and mixes	6.25	233	2559
08.2.2	Heat-treated processed meat, poultry, and game products in whole pieces or cuts	25	233,330, XS96,XS97	2559
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	25	233,377	2559
08.4	Edible casings	7	233	2559

## NITRITES (กลุ่มไนไตรต์)

INS: 249	Potassium nitrite (โพแทสเซียมไนไตรต์) Synonym: -	Functional Class: Colour retention agent, Preservative		
INS: 250	Sodium nitrite (โซเดียมไนไตรต์) Synonym: -	Functional Class: Colour retention agent, Preservative		
FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.2.1.1	Cured (including salted) non-heat treated processed meat, poultry, and game products in whole pieces or cuts	80	32,TH7,TH21	2559

## NITRITES (กลุ่มไนไตรต์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.2.1.3	Fermented non-heat treated processed meat, poultry, and game products in whole pieces or cuts	80	32,TH8,TH21	2559
08.2.2	Heat-treated processed meat, poultry, and game products in whole pieces or cuts	80	32,288,TH7,TH9, TH21	2559
08.3.1.2	Cured (including salted) and dried non-heat treated processed comminuted meat, poultry, and game products	80	32,TH10,TH21	2559
08.3.1.3	Fermented non-heat treated processed comminuted meat, poultry, and game products	80	32,TH8,TH11, TH21	2559
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	80	32,286,287,TH12, TH21	2559

## NITROGEN (ไนโตรเจน)

INS: 941      Synonym: -      Functional Class: Foaming agent, Packaging gas, Propellant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.1	Fluid Milk (plain)	GMP	59	2561
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	59	2559
01.2.2	Renneted milk (plain)	GMP	59	2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP	59,278	2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559

## NITROGEN (ไนโตรเจน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.1.2	Vegetable oils and fats	GMP	59	2561
02.1.3	Animal oils and fats	GMP	59	2561
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.1.3	Peeled or cut fresh fruit	GMP	59	2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559



## NITROGEN (ไนโตรเจน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	GMP	59	2559
13.1.3	Formulae for special medical purposes for infants	GMP	59	2559
13.2	Complementary foods for infants and young children	GMP	59	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	59,160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559

## NITROGEN (ไนโตรเจน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## NITROUS OXIDE (ไนตรัสออกไซด์)

INS: 942      Synonym: Dinitrogen oxide; Dinitrogen monoxide      Functional Class: Antioxidant, Foaming agent, Packaging gas, Propellant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	59	2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP	59,278	2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.1.3	Peeled or cut fresh fruit	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559

## NITROUS OXIDE (ไนตรัสออกไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.1.2	Fresh molluscs, crustaceans, and echinoderms	GMP	390,XS312, XS315	2561
09.2.1	Frozen fish, fish fillets, and fish products	GMP	308,392, XS36,XS92, XS95,XS165, XS190,XS191, XS312,XS315	2561
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559

## NITROUS OXIDE (ไนตรัสออกไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**ORTHO-PHENYLPHENOLS (กลุ่มออร์โท-เฟนิลฟีนอล)**

INS: 231	ortho-Phenylphenol (ออร์โท-เฟนิลฟีนอล) Synonym: Orthoxenol; 2-Hydroxydiphenyl; o-Hydroxydiphenyl	Functional Class: Preservative
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INS: 232	Sodium ortho-phenylphenol (โซเดียมออร์โท-เฟนิลฟีนอล) Synonym: Sodium o-phenylphenate; Sodium ophenylphenolate	Functional Class: Preservative
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.1.2	Surface-treated fresh fruit	12	49	2559

**OXIDIZED POLYETHYLENE (ออกซิไดซ์ดีพอลิเอทิลีน)**

INS: -	Synonym: -	Functional Class: Glazing agent
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.1.2	Surface-treated fresh fruit	GMP		2559
04.2.1.2	Surface-treated fresh vegetables, seaweeds, nuts and seeds	GMP		2559

**OXIDIZED STARCH (ออกซิไดซ์สตาร์ช)**

INS: 1404	Synonym: -	Functional Class: Emulsifier, Stabilizer, Thickener
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP	236	2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559

## OXIDIZED STARCH (ออกซิไดซ์สตาร์ช)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559

## OXIDIZED STARCH (ออกซิไดซ์สตาร์ช)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	XS36, XS92, XS95, XS165, XS190, XS191, XS292, XS312, XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	63	2559
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559

## OXIDIZED STARCH (ออกซิไดซ์สตาร์ช)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	50000	239,269	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## PAPAIN (เอนไซม์ปาเพน)

INS: 1101(ii)

Synonym: -

Functional Class: Flavour enhancer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559



## PAPAIN (เอนไซม์ปาเพน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559

## PAPAIN (เอนไซม์ปาเพน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	100000		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	100000		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**PAPRIKA OLEORESIN (ปาปริก้า โอลีโอเรซิน)**

INS: 160c(i)    Synonym: -

Functional Class: Colour, Flavouring agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6	Cheese and analogues	4400		2559
04.1.2.9	Fruit-based desserts	70		2559
05.4	Decorations, toppings and sweet sauces	2500		2559
06.3	Breakfast cereals	1000		2559
06.6	Batters	3000		2559
07.1.4	Bread-type products	2000		2559
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	500	TH16	2559
09.2.4.1	Cooked fish and fish products	500	TH16	2559
12.2.2	Seasonings and condiments	10000		2559
12.5.1	Ready-to-eat soups and broths	300		
12.5.2	Mixes for soups and broths	10000		2559
12.6	Sauces and like products	10000		2559
12.7	Salads and sandwich spreads	100		

**PECTINS (เพ็คทิน)**

INS: 440    Synonym: -

Functional Class: Emulsifier, Gelling agent,  
Glazing agent, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat- treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559

## PECTINS (เพ็คทิน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559

## PECTINS (เพ็คทิน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	16,391, XS36, XS92, XS95, XS190, XS191, XS292, XS312, XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	177	2559
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559

## PECTINS (เพ็คทิน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.2	Follow-up formulae	10000	72	2559
13.2	Complementary foods for infants and young children	10000	273, 282, 283	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.2.1	Fruit juice	GMP	35	2559
14.1.2.3	Concentrates for fruit juice	GMP	35,127	2559
14.1.3.1	Fruit nectar	GMP		2559
14.1.3.2	Vegetable nectar	GMP		2559
14.1.3.3	Concentrates for fruit nectar	GMP	127	2559
14.1.3.4	Concentrates for vegetable nectar	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## PHOSPHATED DISTARCH PHOSPHATE (ฟอสเฟตไดสตาร์ชฟอสเฟต)

INS: 1413

Synonym: -

Functional Class: Emulsifier, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559

## PHOSPHATED DISTARCH PHOSPHATE (ฟอสเฟตไดสตาร์ชฟอสเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	63	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559



## PHOSPHATED DISTARCH PHOSPHATE (ฟอสเฟตไดสตาร์ชฟอสเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	5000	72,150,284,292	2559
13.1.2	Follow-up formulae	5000	72,150,285,292	2559
13.1.3	Formulae for special medical purposes for infants	5000	72,150,292	2559
13.2	Complementary foods for infants and young children	50000	269,270	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**PHOSPHATES (กลุ่มฟอสเฟต)**

INS: 338	Phosphoric acid (กรดฟอสฟอริก) Synonym: Orthophosphoric acid	Functional Class: Acidity regulator, Antioxidant, Sequestrant
INS: 339(i)	Sodium dihydrogen phosphate (โซเดียมไดไฮโดรเจนฟอสเฟต) Synonym: Monobasic sodium phosphate; Monosodium monophosphate Sodium acid phosphate; Sodium biphosphate; Monosodium dihydrogenortho- phosphate; Monosodium dihydrogen monophosphate	Functional Class: Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabilizer, Thickener
INS: 339(ii)	Disodium hydrogen phosphate (ไดโซเดียมไฮโดรเจนฟอสเฟต) Synonym: Dibasic sodium phosphate; Disodium phosphate; Disodium acid phosphate; Secondary sodium phosphate; Disodium hydrogen orthophosphate; Disodium hydrogen monophosphate	Functional Class: Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Sequestrant, Stabilizer, Thickener
INS: 339(iii)	Trisodium phosphate (ไตรโซเดียมฟอสเฟต) Synonym: Tribasic sodium phosphate; Sodium phosphate; Trisodium orthophosphate; Trisodium monophosphate	Functional Class: Acidity regulator, Emulsifier, Humectant, Preservative, Sequestrant, Stabilizer, Thickener
INS: 340(i)	Potassium dihydrogen phosphate (โพแทสเซียมไดไฮโดรเจนฟอสเฟต) Synonym: Monobasic potassium phosphate; Monopotassium monophosphate potassium acid phosphate; Potassium biphosphate; Monopotassium dihydrogenorthophosphate; Monopotassium dihydrogen monophosphate	Functional Class: Acidity regulator, Emulsifier, Humectant, Sequestrant, Stabilizer, Thickener
INS: 340(ii)	Dipotassium hydrogen phosphate (ไดโพแทสเซียมไฮโดรเจนฟอสเฟต) Synonym: Dibasic potassium phosphate; Dipotassium monophosphate; Dipotassium phosphate; Dipotassium acid phosphate; Secondary potassium phosphate;	Functional Class: Acidity regulator, Emulsifier, Humectant, Sequestrant, Stabilizer, Thickener

	Dipotassium hydrogen orthophosphate; Dipotassium hydrogen monophosphate	
INS: 340(iii)	<p>Tripotassium phosphate (ไตรโพแทสเซียมฟอสเฟต)</p> <p>Synonym: Tribasic potassium phosphate; Potassium phosphate; Tripotassium orthophosphate; Tripotassium monophosphate</p>	Functional Class: Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Sequestrant, Stabilizer, Thickener
INS: 341(i)	<p>Calcium dihydrogen phosphate (แคลเซียมไดไฮโดรเจนฟอสเฟต)</p> <p>Synonym: Monobasic calcium phosphate, monocalcium orthophosphate, monocalcium phosphate, calcium biphosphate, acid calcium phosphate</p>	Functional Class: Acidity regulator, Anticaking agent, Emulsifying salt, Firming agent, Flour treatment agent, Humectant, Raising agent, Stabilizer, Thickener, Sequestrant
INS: 341(ii)	<p>Calcium hydrogen phosphate (แคลเซียมไฮโดรเจนฟอสเฟต)</p> <p>Synonym: Dibasic calcium phosphate; Dicalcium phosphate; Calcium monohydrogen phosphate; Calcium hydrogen orthophosphate, Secondary calcium phosphate</p>	Functional Class: Acidity regulator, Anticaking agent, Emulsifying salt, Firming agent, Flour treatment agent, Humectant, Raising agent, Stabilizer, Thickener
INS: 341(iii)	<p>Tricalcium phosphate (ไตรแคลเซียมฟอสเฟต)</p> <p>Synonym: Calcium phosphate, tribasic; precipitated calcium phosphate</p>	Functional Class: Acidity regulator, Anticaking agent, Emulsifier, Emulsifying salt, Firming agent, Flour treatment agent, Humectant, Raising agent, Stabilizer, Thickener
INS: 342(i)	<p>Ammonium dihydrogen phosphate (แอมโมเนียมไดไฮโดรเจนฟอสเฟต)</p> <p>Synonym: Monobasic ammonium phosphate; Monoammonium phosphate; Acid ammonium phosphate; Primary ammonium phosphate; Ammonium dihydrogen tetraoxophosphate; Monoammonium monophosphate; Ammonium dihydrogen orthophosphate</p>	Functional Class: Acidity regulator, Flour treatment agent, Raising agent, Stabilizer, Thickener
INS: 342(ii)	<p>Diammonium hydrogen phosphate (ไดแอมโมเนียมไฮโดรเจนฟอสเฟต)</p> <p>Synonym: Dibasic ammonium phosphate, Diammonium</p>	Functional Class: Acidity regulator, Flour treatment agent, Raising agent, Stabilizer, Thickener

	phosphate; Diammonium hydrogen tetraoxophosphate; Diammonium hydrogen orthophosphate	
INS: 343(i)	Magnesium dihydrogen phosphate (แมกนีเซียมไดไฮโดรเจนฟอสเฟต) Synonym: Monomagnesium orthophosphate, Magnesium dihydrogen phosphate; Magnesium phosphate, monobasic; Magnesium biphosphate; Acid magnesium phosphate; Monomagnesium dihydrogen phosphate	Functional Class: Acidity regulator, Anticaking agent, Emulsifying salt, Stabilizer, Thickener
INS: 343(ii)	Magnesium hydrogen phosphate (แมกนีเซียมไฮโดรเจนฟอสเฟต) Synonym: Magnesium phosphate, dibasic; secondary magnesium phosphate; Dimagnesium phosphate; Magnesium hydrogen orthophosphate trihydrate; Magnesium salt of phosphoric acid	Functional Class: Acidity regulator, Anticaking agent, Emulsifying salt, Raising agent, Stabilizer, Thickener
INS: 343(iii)	Trimagnesium phosphate (ไตรแมกนีเซียมฟอสเฟต) Synonym: Magnesium phosphate, tribasic; Tertiary magnesium phosphate; Trimagnesium orthophosphate	Functional Class: Acidity regulator, Anticaking agent, Stabilizer, Thickener
INS: 450(i)	Disodium diphosphate (ไดโซเดียมไดฟอสเฟต) Synonym: Disodium dihydrogen diphosphate; Disodium dihydrogen pyrophosphate; Acid sodium pyrophosphate; Disodium Pyrophosphate; Disodium dihydrogen diphosphate; Disodium dihydrogen pyrophosphate	Functional Class: Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabilizer, Thickener
INS: 450(ii)	Trisodium diphosphate (ไตรโซเดียมไดฟอสเฟต) Synonym: Acid trisodium pyrophosphate, trisodium monohydrogen diphosphate	Functional Class: Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabilizer, Thickener

INS: 450(iii)	Tetrasodium diphosphate (เตตระโซเดียมไดฟอสเฟต) Synonym: Tetrasodium diphosphate, sodium pyrophosphate	Functional Class: Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabilizer, Thickener
INS: 450(ix)	Magnesium dihydrogen diphosphate (แมกนีเซียมไดไฮโดรเจนไดฟอสเฟต) Synonym: Acid magnesium pyrophosphate, monomagnesium dihydrogen pyrophosphate; magnesium diphosphate	Functional Class: Acidity regulator, Raising agent, Stabilizer
INS: 450(v)	Tetrapotassium diphosphate (เตตระโพแทสเซียมไดฟอสเฟต) Synonym: Tetrapotassium diphosphate; Potassium pyrophosphate; Tetrapotassium salt of diphosphoric acid	Functional Class: Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabilizer, Thickener
INS: 450(vi)	Dicalcium diphosphate (ไดแคลเซียมไดฟอสเฟต) Synonym: Calcium pyrophosphate; Dicalcium Pyrophosphate; Dicalcium diphosphate	Functional Class: Acidity regulator, Emulsifier, Emulsifying salt, Firming agent, Raising agent, Sequestrant, Stabilizer, Thickener
INS: 450(vii)	Calcium dihydrogen diphosphate (แคลเซียมไดไฮโดรเจนไดฟอสเฟต) Synonym: Acid calcium pyrophosphate; Monocalcium dihydrogen pyrophosphate; Monocalcium dihydrogen diphosphate	Functional Class: Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabilizer
INS: 451(i)	Pentasodium triphosphate (เพนทโซเดียมไตรฟอสเฟต) Synonym: Pentasodium tripolyphosphate, Sodium triphosphate, Sodium tripolyphosphate, Triphosphate	Functional Class: Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Sequestrant, Stabilizer, Thickener
INS: 451(ii)	Pentapotassium triphosphate (เพนทโพแทสเซียมไตรฟอสเฟต) Synonym: Pentapotassium tripolyphosphate, potassium triphosphate, potassium tripolyphosphate	Functional Class: Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Sequestrant, Stabilizer, Thickener
INS: 452(i)	Sodium polyphosphate (โซเดียมพอลิฟอสเฟต) Synonym: Sodium hexametaphosphate, sodium tetrapolyphosphate, Graham's salt	Functional Class: Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabilizer, Thickener

INS: 452(ii)	Potassium polyphosphate (โพแทสเซียมพอลิฟอสเฟต) Synonym: Potassium metaphosphate; Potassium polymetaphosphate	Functional Class: Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabilizer, Thickener
INS: 452(iii)	Sodium calcium polyphosphate (โซเดียมแคลเซียมพอลิฟอสเฟต) Synonym: Sodium calcium polyphosphate, glassy	Functional Class: Acidity regulator, Emulsifier, Humectant, Raising agent, Sequestrant, Stabilizer
INS: 452(iv)	Calcium polyphosphate (แคลเซียมพอลิฟอสเฟต) Synonym: -	Functional Class: Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabilizer, Thickener
INS: 452(v)	Ammonium polyphosphate (แอมโมเนียมพอลิฟอสเฟต) Synonym: -	Functional Class: Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Sequestrant, Stabilizer, Thickener
INS: 542	Bone phosphate (โบนฟอสเฟต) Synonym: Edible bone phosphate	Functional Class: Anticaking agent, Emulsifier, Humectant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.1	Fluid Milk (plain)	500	33,227	2561
01.1.3	Fluid Buttermilk (plain)	1500	33,227,397	2561
01.1.4	Flavoured Fluid Milk Drinks	1000	33,364,398	2561
01.2	Fermented and renneted milk products (plain)	1000	33	2559
01.3.1	Condensed milk (plain)	880	33	2559
01.3.2	Beverage whiteners	13000	33	2559
01.4	Cream (plain) and the like	2200	33	2559
01.5.1	Milk powder and cream powder (plain)	4400	33	2559
01.5.2	Milk and cream powder analogues	4400	33,88	2559
01.6.1	Unripened cheese	4400	33	2559
01.6.4	Processed cheese	9000	33	2559
01.6.5	Cheese analogues	9000	33	2559
01.7	Dairy-based desserts	1500	33	2559
01.8.1	Liquid whey and whey products	880	33,228	2559
01.8.2	Dried whey and whey products	4400	33	2559
02.2.1	Butter	880	33,34	2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	2200	33	2559
02.3	Fat emulsions mainly of type oil-in- water	2200	33	2559
02.4	Fat-based desserts	1500	33	2559
03.0	Edible ices	7500	33	2559

## PHOSPHATES (กลุ่มฟอสเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.2.3	Fruit in vinegar, oil, or brine	2200	33	2559
04.1.2.6	Fruit-based spreads for spread or raw materials	1100	33	2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	10	33	2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	350	33	2559
04.1.2.9	Fruit-based desserts	1500	33	2559
04.1.2.10	Fermented fruit products	2200	33	2559
04.1.2.11	Fruit fillings	1500	33	2559
04.2.1.2	Surface-treated fresh vegetables, seaweeds, nuts and seeds	1760	16,33	2559
04.2.1.3	Peeled, cut or shredded fresh vegetables, seaweeds, nuts and seeds	5600	33,76	2559
04.2.2.1	Frozen vegetables, seaweeds, nuts and seeds	5000	33,76	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	5000	33,76	2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	2200	33	2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	2200	33	2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	2200	33,76	2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	2200	33	2559
04.2.2.7	Fermented vegetable and seaweed products	2200	33	2559
04.2.2.8	Cooked or fried vegetables and seaweeds	2200	33,76	2559
05.1.1	Cocoa mixes (powders), cocoa mass and cocoa cake	1100	33,97	2559
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	880	33,XS86	2559
05.1.4	Cocoa and chocolate products	1100	33	2559
05.1.5	Imitation chocolate, chocolate substitute products	2200	33	2559

## PHOSPHATES (กลุ่มฟอสเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.2	Confectionery including candy, nougats and marzipans	2200	33,XS309R	2561
05.3	Chewing gum	44000	33	2559
05.4	Decorations, toppings and sweet sauces	1500	33	2559
06.2.1	Flours	2500	33,225	2559
06.3	Breakfast cereals	2200	33	2559
06.4.1	Fresh pastas and noodles and like products	2500	33,211	2559
06.4.2	Dried pastas and noodles and like products	900	33,211	2559
06.4.3	Pre-cooked pastas and noodles and like products	2500	33,211	2559
06.5	Cereal and starch based desserts	3500	33	2561
06.6	Batters	5600	33	2559
06.8.1	Soybean-based beverages	1000	33	2561
06.8.3	Soybean curd	100	33	2559
07.1.1.2	Soda breads	6000	33,229	2561
07.1.2	Crackers, excluding sweet crackers	6000	33,229	2561
07.1.3	Other ordinary bakery products	6000	33,229	2561
07.1.4	Bread-type products	6000	33,229	2561
07.1.5	Steamed breads and buns	6000	33,229	2561
07.1.6	Mixes for bread and ordinary bakery wares products of food categories 07.1.1-07.1.5	6000	33,229	2561
07.2	Fine bakery wares and mixes	6000	33,229	2561
08.2.1	Non-heat treated processed meat, poultry, and game products in whole pieces or cuts	2200	33	2559
08.2.2	Heat-treated processed meat, poultry, and game products in whole pieces or cuts	1320	33,289	2559
08.2.3	Frozen processed meat, poultry and game products in whole pieces or cuts	2200	33	2559
08.3	Processed comminuted meat, poultry, and game products	2200	33,302,XS88	2559
08.4	Edible casings	1100	33	2559
09.2.1	Frozen fish, fish fillets, and fish products	2200	33,393,394, XS36,XS191, XS292,XS312	2561



## PHOSPHATES (กลุ่มฟอสเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.2	Frozen battered fish, fish fillets and fish products	2200	33,299	2561
09.2.3	Frozen minced and creamed fish products	2200	33	2559
09.2.4.1	Cooked fish and fish products	2200	33	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	2200	33	2559
09.3.1	Fish and fish products marinated in vinegar or wine	2200	33	2559
09.3.2	Pickled fish and fish products	2200	33	2559
09.3.3	Caviar and other fish roe products	2200	33	2559
09.3.4	Semi-preserved fish and fish products, excluding products of food categories 09.3.1 - 09.3.3	2200	33,193	2559
09.4	Fully preserved, including canned fish and fish products	2200	33	2559
10.2.1	Liquid egg products	4400	33,67	2559
10.2.2	Frozen egg products	1290	33	2559
10.3	Preserved eggs	1000	33	2559
10.4	Egg-based desserts	1400	33	2559
11.1.2	Powdered sugar, powdered dextrose	6600	33,56	2559
11.4	Other sugars and syrups	1320	33	2559
11.6	Table-top sweeteners directly sold to consumers	1000	33	2559
12.1.1	Salt	8800	33	2559
12.1.2	Salt substitutes	4400	33	2559
12.2.2	Seasonings and condiments	2200	33,226	2559
12.5	Soups and broths	1500	33,343	2559
12.6	Sauces and like products	2200	33	2559
12.9	Soybean-based seasonings and condiments	1200	33	2559
13.2	Complementary foods for infants and young children	4400	33,230	2559
13.3	Dietetic foods intended for special medical purposes	2200	33	2559
13.4	Dietetic formulae for slimming purposes and weight reduction	2200	33	2559
13.5	Dietetic foods	2200	33	2559
13.6	Food supplements	2200	33	2559

## PHOSPHATES (กลุ่มฟอสเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.2.1	Fruit juice	1000	33,40,122	2559
14.1.2.3	Concentrates for fruit juice	1000	33,40,122,127	2559
14.1.3.1	Fruit nectar	1000	33,40,122	2559
14.1.3.3	Concentrates for fruit nectar	1000	33, 40,122,127	2559
14.1.4	Water-based flavoured drinks	1000	33,127	2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	300	33,127,160	2559
14.2.2	Cider and perry	880	33	2559
14.2.5	Mead	440	33,88	2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	440	33,88	2559
15.0	Ready-to-eat savouries	2200	33	2559

## POLYDEXTROSES (พอลิเดกซ์โทรส)

INS: 1200      Synonym: Modified polydextroses      Functional Class: Bulking agent, Glazing agent, Humectant, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP	236	2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559

## POLYDEXTROSES (พอลิเดกซ์โทรส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	XS36,XS92, XS95,XS165, XS190,XS191, XS292,XS312, XS315	2561

## POLYDEXTROSES (พอลิเดกซ์โทรส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559

## POLYDEXTROSES (พอลิเดกซ์โทรส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## POLYDIMETHYLSILOXANE (พอลิไดเมทิลไซลอกเซน)

INS: 900a	Synonym: Poly(dimethylsiloxane); Dimethylpolysiloxane; Dimethylsilicone fluid; Dimethylsilicone oil; Dimethicone	Functional Class: Anticaking agent, Foaming agent, Emulsifier		
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.5.1	Milk powder and cream powder (plain)	10		2559
02.1.2	Vegetable oils and fats	10		2559
02.1.3	Animal oils and fats	10		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	10	152	2559
04.1.2.3	Fruit in vinegar, oil, or brine	10		2559
04.1.2.4	Canned or bottled fruit	10		2559
04.1.2.5	Jams, jellies and marmalades	30		2559
04.1.2.6	Fruit-based spreads for spread or raw materials	10		2559
04.1.2.9	Fruit-based desserts	110		2559
04.1.2.10	Fermented fruit products	10		2559
04.2.2.1	Frozen vegetables, seaweeds, nuts and seeds	10	15	2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	10		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	10		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	10		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	50		2559
04.2.2.7	Fermented vegetable and seaweed products	10		2559

## POLYDIMETHYLSILOXANE (พอลิไดเมทิลไซลอกเซน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.1.5	Imitation chocolate, chocolate substitute products	10		2559
05.2	Confectionery including candy, nougats and marzipans	10	XS309R	2561
05.3	Chewing gum	100		2559
06.4.3	Pre-cooked pastas and noodles and like products	50	153	2559
06.6	Batters	10		2559
12.5	Soups and broths	10		2559
13.3	Dietetic foods intended for special medical purposes	50		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	50		2559
13.5	Dietetic foods	50		2559
13.6	Food supplements	50		2559
14.1.4	Water-based flavoured drinks	20	127	2559
14.2.1	Beer and malt beverages	10		2559
14.2.2	Cider and perry	10		2559
14.2.7	Aromatized alcoholic beverages	10		2559

## POLYETHYLENE GLYCOL (พอลิเอทิลีนไกลคอล)

INS: 1521      Synonym: PEG; Macrogol      Functional Class: Foaming agent, Carrier, Emulsifier, Glazing agent, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.1.2	Surface-treated fresh fruit	GMP		2559
05.3	Chewing gum	20000		2559
11.6	Table-top sweeteners directly sold to consumers	10000		2559
13.6	Food supplements	70000		2559
14.1.4	Water-based flavoured drinks	500	127	2561

**POLYGLYCEROL ESTERS of FATTY ACIDS (พอลิกลีเซอรอลเอสเทอร์ของกรดไขมัน)**

INS: 475      Synonym: Polyglycerol fatty acid      Functional Class: Emulsifier  
 esters; Glycerin fatty acid  
 esters

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.3.2	Beverage whiteners	5000	352,XS250, XS252	2559
01.4.1	Pasteurized cream (plain)	6000		2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	6000		2559
01.4.3	Clotted cream (plain)	6000		2559
01.4.4	Cream analogues	8000		2559
01.5.2	Milk and cream powder analogues	5000	XS251	2559
01.6.5	Cheese analogues	5000		2559
01.7	Dairy-based desserts	2000	354,XS243	2561
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	5000	359	2559
02.3	Fat emulsions mainly of type oil-in- water	20000	363	2559
02.4	Fat-based desserts	2000		2559
03.0	Edible ices	2000		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	5000	XS240,XS314R	2559
04.1.2.9	Fruit-based desserts	2000		2559
04.1.2.11	Fruit fillings	2000		2559
05.1.1	Cocoa mixes (powders), cocoa mass and cocoa cake	5000	97,XS141	2559
05.1.5	Imitation chocolate, chocolate substitute products	2000	366	2559
05.2	Confectionery including candy, nougats and marzipans	2000	367,XS309R	2559
05.3	Chewing gum	5000		2559
05.4	Decorations, toppings and sweet sauces	2000	368	2559
06.3	Breakfast cereals	10000	369	2559
06.4.3	Pre-cooked pastas and noodles and like products	2000	194	2559
06.5	Cereal and starch based desserts	3000		2559

## POLYGLYCEROL ESTERS of FATTY ACIDS (พอลิกลีเซอรอลเอสเทอร์ของกรดไขมัน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
07.1.1	Breads and rolls	10000	372	2559
07.1.2	Crackers, excluding sweet crackers	5000		2559
07.1.3	Other ordinary bakery products	5000		2559
07.1.4	Bread-type products	5000		2559
07.1.6	Mixes for bread and ordinary bakery wares products of food categories 07.1.1-07.1.5	15000	11	2559
07.2.1	Cakes, cookies and pies	10000		2559
07.2.2	Other fine bakery products	10000		2559
07.2.3	Mixes for fine bakery wares products of food categories 07.2.1-07.2.2	10000	11	2559
08.4	Edible casings	5000	365	2561

## POLYGLYCEROL ESTERS OF INTERESTERIFIED RICINOLEIC ACID

(พอลิกลีเซอรอลเอสเทอร์ของกรดริซินโนเลอิกที่ถูกรวมอินเทอร์เอสเทอร์ไฟต์)

INS: 476      Synonym: Glyceran esters of      Functional Class: Emulsifier  
condensed castor oil fatty  
acids; Polyglycerol esters of  
polycondensed fatty acids  
from castor oil

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.5.2	Milk and cream powder analogues	5000	XS251	2559
01.7	Dairy-based desserts	1500	XS243	2561
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	4000	359	2559
02.3	Fat emulsions mainly of type oil-in- water	10000		2559
02.4	Fat-based desserts	2000		2559
04.1.2.9	Fruit-based desserts	1000		2561
04.1.2.11	Fruit fillings	2000		2559
05.1.1	Cocoa mixes (powders), cocoa mass and cocoa cake	5000	97	2559
05.1.4	Cocoa and chocolate products	5000	101	2559
05.1.5	Imitation chocolate, chocolate substitute products	3000	366	2559
05.2	Confectionery including candy, nougats and marzipans	3000	XS309R	2559
05.3	Chewing gum	500		2561



## POLYGLYCEROL ESTERS OF INTERESTERIFIED RICINOLEIC ACID

(พอลิกลีเซอรอลเอสเทอร์ของกรดริซินโนเลอิกที่ถูกอินเทอร์เอสเทอร์ไฟต์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.4	Decorations, toppings and sweet sauces	5000		2559
06.4.3	Pre-cooked pastas and noodles and like products	500	194	2559
06.5	Cereal and starch based desserts	2000		2561
08.4	Edible casings	5000	365	2561

## POLYOXYETHYLENE STEARATES (กลุ่มพอลิออกซิเอทิลีนสเตียเรต)

INS: 430	Polyoxyethylene (8) Stearate (พอลิออกซิเอทิลีน (8) สเตียเรต) Synonym: Polyoxyl (8) stearate	Functional Class: Emulsifier		
INS: 431	Polyoxyethylene (40) Stearate (พอลิออกซิเอทิลีน (40) สเตียเรต) Synonym: Polyoxyl (40) stearate; Polyoxyethylene (40) monostearate	Functional Class: Emulsifier		

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.3	Chewing gum	200		2561
06.4.3	Pre-cooked pastas and noodles and like products	5000	2,194	2559
07.1	Bread and ordinary bakery wares and mixes	3000		2559
07.2	Fine bakery wares and mixes	3000		2559

## POLYGLYCITOL SYRUP (พอลิไกลซิทอลไซรัป)

INS: 964	Synonym: Hydrogenated starch hydrolysate; Polyglucitol	Functional Class: Sweetener		
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP	TH1	2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559

## POLYGLYCITOL SYRUP (พอลิไกลซีทอลไซรัป)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559

## POLYGLYCITOL SYRUP (พอลิไกลซิทอลไซรัป)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP	TH3	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**POLYSORBATES (กลุ่มพอลิซอร์เบต)**

INS: 432	Polyoxyethylene (20) sorbitan monolaurate (พอลิออกซีเอทิลีน (20) ซอร์บิแทนมอโนลอเรต) Synonym: Polysorbate 20	Functional Class: Emulsifier, Stabilizer
INS: 433	Polyoxyethylene (20) sorbitan monooleate (พอลิออกซีเอทิลีน (20) ซอร์บิแทนมอโนโอเลต) Synonym: Polysorbate 80	Functional Class: Emulsifier, Stabilizer
INS: 434	Polyoxyethylene (20) sorbitan monopalmitate (พอลิออกซีเอทิลีน (20) ซอร์บิแทนมอโนแพลมิเตต) Synonym: Polysorbate 40	Functional Class: Emulsifier
INS: 435	Polyoxyethylene (20) sorbitan monostearate (พอลิออกซีเอทิลีน (20) ซอร์บิแทนมอโนสเตียเรต) Synonym: Polysorbate 60	Functional Class: Emulsifier, Stabilizer
INS: 436	Polyoxyethylene (20) sorbitan tristearate (พอลิออกซีเอทิลีน (20) ซอร์บิแทนไตรสเตียเรต) Synonym: Polysorbate 65	Functional Class: Emulsifier, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.3.2	Beverage whiteners	4000		2559
01.4.1	Pasteurized cream (plain)	1000		2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	1000		2559
01.4.3	Clotted cream (plain)	1000		2559
01.4.4	Cream analogues	5000		2559
01.5.2	Milk and cream powder analogues	4000		2559
01.6.1	Unripened cheese	80	38	2559
01.7	Dairy-based desserts	1000		2559
02.1.2	Vegetable oils and fats	5000	102	2559
02.1.3	Animal oils and fats	5000	102	2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	10000	360,364	2559
02.3	Fat emulsions mainly of type oil-in-water	5000	102	2559
02.4	Fat-based desserts	3000	102	2559
03.0	Edible ices	1000		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	1000	154	2559

## POLYSORBATES (กลุ่มพอลิซอร์เบต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.2.9	Fruit-based desserts	1500		2561
04.1.2.11	Fruit fillings	3000		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	3000		2559
05.1.2	Cocoa mixes (syrops)	500		2559
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	1000	XS86	2559
05.1.4	Cocoa and chocolate products	5000	101	2559
05.1.5	Imitation chocolate, chocolate substitute products	5000		2559
05.2	Confectionery including candy, nougats and marzipans	1000	XS309R	2561
05.3	Chewing gum	5000		2559
05.4	Decorations, toppings and sweet sauces	3000		2559
06.4.2	Dried pastas and noodles and like products	2500		2561
06.4.3	Pre-cooked pastas and noodles and like products	2500	153	2561
06.5	Cereal and starch based desserts	1500		2561
06.6	Batters	5000	2	2559
07.1.1	Breads and rolls	3000		2559
07.1.2	Crackers, excluding sweet crackers	5000	11	2559
07.1.3	Other ordinary bakery products	3000	11	2559
07.1.4	Bread-type products	3000	11	2559
07.1.5	Steamed breads and buns	3000	11	2559
07.1.6	Mixes for bread and ordinary bakery wares products of food categories 07.1.1-07.1.5	3000	11	2559
07.2	Fine bakery wares and mixes	3000		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	2500	XS96, XS97	2561
08.3	Processed comminuted meat, poultry, and game products	2500	XS88, XS89, XS98	2561
08.4	Edible casings	1500		2559
10.4	Egg-based desserts	3000		2559
12.1.1	Salt	10		2559
12.2.1	Herbs and spices	2000		2559
12.2.2	Seasonings and condiments	5000		2559

## POLYSORBATES (กลุ่มพอลิซอร์เบต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.5	Soups and broths	1000		2559
12.6.1	Emulsified sauces and dips	3000		2559
12.6.2	Non-emulsified sauces	3000		2561
12.6.3	Mixes for sauces and gravies	5000	127	2559
12.6.4	Clear sauces	5000		2559
12.7	Salads and sandwich spreads	2000		2559
13.3	Dietetic foods intended for special medical purposes	1000		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	1000		2559
13.6	Food supplements	25000		2559
14.1.4	Water-based flavoured drinks	500	127	2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	120		2559
14.2.7	Aromatized alcoholic beverages	120		2559

## POLYVINYL ALCOHOL (พอลิไวนิลแอลกอฮอล์)

INS: 1203      Synonym: Vinyl alcohol polymer;  
PVOH; Ethenol homopolymer      Functional Class: Glazing agent, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.6	Food supplements	45000		2559

## POLYVINYLPIRROLIDONE (พอลิไวนิลพิร์โรลิโดน)

INS: 1201      Synonym: Povidone; PVP      Functional Class: Emulsifier, Glazing agent,  
Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.1.2	Surface-treated fresh fruit	GMP		2559
05.3	Chewing gum	10000		2559
11.6	Table-top sweeteners directly sold to consumers	3000		2559
12.3	Vinegars	40		2559
13.6	Food supplements	GMP		2559
14.1.4.3	Concentrates (liquid or solid form) for water-based flavoured drinks	500		2559
14.2.1	Beer and malt beverages	10	36	2559
14.2.2	Cider and perry	2	36	2559

**POLYVINYLPIRROLIDONE, INSOLUBLE (พอลิไวนิลไพร์โรลิโดนที่ไม่ละลาย)**

INS: 1202      Synonym: Crospovidone; Cross linked polyvidone; Insoluble PVP; Polyvinylpolypyrrolidone; Cross linked homopolymer of 1-ethenyl-2-pyrrolidone, insoluble cross linked homopolymer of N-vinyl-1-pyrrolidone

Functional Class: Colour retention agent, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559

## POLYVINYLPIRROLIDONE, INSOLUBLE (พอลิไวนิลไพร์โรลิโดนที่ไม่ละลาย)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559



## POLYVINYLPIRROLIDONE, INSOLUBLE (พอลิไวนิลไพร์โรลิโดนที่ไม่ละลาย)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## PONCEAU 4R (โป่งโซ 4 อาร์)

INS: 124      Synonym: CI Food Red 7; Cochineal  
Red A; New Coccine; Brilliant  
Scarlet; CI (1975) No. 16255      Functional Class: Colour

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	70	52	2559
01.6.1	Unripened cheese	100	3	2559
01.6.2.2	Rind of ripened cheese	100		2559
01.6.4.2	Flavoured processed cheese	100		2559
01.6.5	Cheese analogues	100	3	2559
01.7	Dairy-based desserts	150		2559
02.4	Fat-based desserts	50		2559
03.0	Edible ices	50		2559
04.1.2.4	Canned or bottled fruit	300		2559
04.1.2.5	Jams, jellies and marmalades	100		2559
04.1.2.6	Fruit-based spreads for spread or raw materials	500		2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	200		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	50	182	2559
04.1.2.9	Fruit-based desserts	50		2559
04.1.2.11	Fruit fillings	50		2559

## PONCEAU 4R (ปองโซ่ 4 อารี่)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.7	Fermented vegetable and seaweed products	500		2559
05.1.4	Cocoa and chocolate products	300	183	2559
05.1.5	Imitation chocolate, chocolate substitute products	50		2559
05.2	Confectionery including candy, nougats and marzipans	300	XS309R	2561
05.3	Chewing gum	300		2559
05.4	Decorations, toppings and sweet sauces	50		2559
06.5	Cereal and starch based desserts	50		2559
07.2	Fine bakery wares and mixes	50		2559
08.4	Edible casings	500	16	2559
09.2.1	Frozen fish, fish fillets, and fish products	30	395, XS36, XS95, XS165, XS190, XS191, XS292, XS312, XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	500	16,95, XS166	2561
09.2.3	Frozen minced and creamed fish products	500	16,95	2559
09.2.4.1	Cooked fish and fish products	500	95	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	250		2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	100	22, XS311	2559
09.3.3	Caviar and other fish roe products	500		2559
09.3.4	Semi-preserved fish and fish products, excluding products of food categories 09.3.1 - 09.3.3	100		2559
09.4	Fully preserved, including canned fish and fish products	500		2559
10.1	Fresh eggs	500	4	2559
10.4	Egg-based desserts	50		2559
11.4	Other sugars and syrups	300	159	2559
12.2.2	Seasonings and condiments	500		2559
12.4	Mustards	300		2559
12.5	Soups and broths	50		2559

## PONCEAU 4R (ปองโซ 4 อาร์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.6	Sauces and like products	50		2559
12.7	Salads and sandwich spreads	200		2559
13.3	Dietetic foods intended for special medical purposes	50		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	50		2559
13.5	Dietetic foods	300		2559
13.6	Food supplements	300		2559
14.1.4	Water-based flavoured drinks	50	127	2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	200		2559
14.2.7	Aromatized alcoholic beverages	200		2559
15.1	Snacks - potato, cereal, flour or starch based	200		2559
15.2	Snacks - Processed nut or flavoured processed seed based	100		2559

## POTASSIUM 5'-INOSINATE (โพแทสเซียม 5'-ไอินซินเนต)

INS: 632	Synonym: Potassium inosinate; Dipotassium 5'-inosinate; Dipotassium inosine-5'- monophosphate	Functional Class: Flavour enhancer
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559

## POTASSIUM 5'-INOSINATE (โพแทสเซียม 5'-ไอินซินเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559

## POTASSIUM 5'-INOSINATE (โพแทสเซียม 5'-ไอินซินเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	100000		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	100000		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## POTASSIUM ACETATES (โพแทสเซียมแอสซีเทต)

INS: 261(i)

Synonym: -

Functional Class: Acidity regulator, Preservative

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559

## POTASSIUM ACETATES (โพแทสเซียมแอสีเตต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559

## POTASSIUM ACETATES (โพแทสเซียมแอสีเตต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	GMP	239	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559

## POTASSIUM ACETATES (โพแทสเซียมแอสีเตต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## POTASSIUM ALGinate (โพแทสเซียมแอลจีเนต)

INS: 402	Synonym: Potassium salt of alginic acid	Functional Class: Bulking agent, Carrier, Emulsifier, Foaming agent, Gelling agent, Glazing agent, Humectant, Sequestrant, Stabilizer, Thickener		
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559



## POTASSIUM ALGinate (โพแทสเซียมแอลจีเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	XS36,XS92, XS95,XS165, XS190,XS191, XS292,XS312, XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	63	2561
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559

## POTASSIUM ALGinate (โพแทสเซียมแอลจีเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**POTASSIUM CARBONATE (โพแทสเซียมคาร์บอเนต)**

INS: 501(i)    Synonym: Potassium salt of carbonic acid    Functional Class: Acidity regulator, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559

## POTASSIUM CARBONATE (โพแทสเซียมคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	11000		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41	2559
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.4	Cooked and/or fried fish and fish products	GMP		2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	230,266,267	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559

## POTASSIUM CARBONATE (โพแทสเซียมคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	2000	55,72	2559
13.1.2	Follow-up formulae	GMP	72	2559
13.1.3	Formulae for special medical purposes for infants	2000	55,72	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**POTASSIUM CHLORIDE (โพแทสเซียมคลอไรด์)**

INS: 508

Synonym: Sylvine; Sylvite

Functional Class: Firming agent, Flavour  
enhancer, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559

## POTASSIUM CHLORIDE (โพแทสเซียมคลอไรด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	XS36,XS92, XS95,XS165, XS190,XS191, XS292,XS312, XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41,XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559

## POTASSIUM CHLORIDE (โพแทสเซียมคลอไรด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## POTASSIUM DIHYDROGEN CITRATE (โพแทสเซียมไดไฮโดรเจนซิเตรต)

INS: 332(i)      Synonym: Monopotassium citrate;  
Potassium citrate monobasic      Functional Class: Acidity regulator, Emulsifying  
salt, Sequestrant, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.3	บัตเตอร์มิลค์ชนิดเหลว (ไม่ปรุงแต่ง)	GMP	261	2559



## POTASSIUM DIHYDROGEN CITRATE (โพแทสเซียมไดไฮโดรเจนซิเตรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP		2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.1	Frozen vegetables, seaweeds, nuts and seeds	GMP	29	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559

## POTASSIUM DIHYDROGEN CITRATE (โพแทสเซียมไดไฮโดรเจนซิเตรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2	Processed fish and fish products	GMP	253,391, XS36,XS92, XS95,XS190, XS191,XS292, XS312,XS315	2561
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559

## POTASSIUM DIHYDROGEN CITRATE (โพแทสเซียมไดไฮโดรเจนซิเตรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	GMP	55,72	2559
13.1.2	Follow-up formulae	GMP	72	2559
13.1.3	Formulae for special medical purposes for infants	GMP	55,72	2559
13.2	Complementary foods for infants and young children	GMP	239	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**POTASSIUM GLUCONATE (โพแทสเซียมกลูโคเนต)**

INS: 577

Synonym: Potassium D-gluconate

Functional Class: Acidity regulator, Sequestrant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559

## POTASSIUM GLUCONATE (โพแทสเซียมกลูโคเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559

## POTASSIUM GLUCONATE (โพแทสเซียมกลูโคเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## POTASSIUM HYDROGEN CARBONATE (โพแทสเซียมไฮโดรเจนคาร์บอเนต)

INS: 501(ii)    Synonym: Potassium bicarbonate;  
Potassium acid carbonate    Functional Class: Acidity regulator, Raising agent,  
Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559

## POTASSIUM HYDROGEN CARBONATE (โพแทสเซียมไฮโดรเจนคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559

## POTASSIUM HYDROGEN CARBONATE (โพแทสเซียมไฮโดรเจนคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	2000	55,72	2559
13.1.2	Follow-up formulae	GMP	72	2559
13.1.3	Formulae for special medical purposes for infants	2000	55,72	2559
13.2	Complementary foods for infants and young children	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## POTASSIUM HYDROXIDE (โพแทสเซียมไฮดรอกไซด์)

INS: 525      Synonym: Caustic potash, Potassium hydrate      Functional Class: Acidity regulator

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559



## POTASSIUM HYDROXIDE (โพแทสเซียมไฮดรอกไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559

## POTASSIUM HYDROXIDE (โพแทสเซียมไฮดรอกไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	2000	55,72	2559
13.1.2	Follow-up formulae	GMP	72	2559
13.1.3	Formulae for special medical purposes for infants	2000	55,72	2559
13.2	Complementary foods for infants and young children	GMP	239	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559

## POTASSIUM HYDROXIDE (โพแทสเซียมไฮดรอกไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## POTASSIUM LACTATE (โพแทสเซียมแล็กเตต)

INS: 326      Synonym: Potassium 2-hydroxypropanoate      Functional Class: Acidity regulator, Antioxidant, Emulsifier, Humectant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.3	Fluid Buttermilk (plain)	GMP	261	2559
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP		2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559

## POTASSIUM LACTATE (โพแทสเซียมแล็กเตต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559

## POTASSIUM LACTATE (โพแทสเซียมแล็กเตต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	GMP	83,239	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## POTASSIUM PROPIONATE (โพแทสเซียมโพรพิโอเนต)

INS: 283

Synonym: -

Functional Class: Preservative

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP	TH1,TH4	2559
01.3	Condensed milk (plain) and analogues	GMP		2559

## POTASSIUM PROPIONATE (โพแทสเซียมโพรพิโอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP	TH4,TH5	2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP	TH4	2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559

## POTASSIUM PROPIONATE (โพแทสเซียมโพรพิโอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP	TH6	2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP	TH6	2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**POTASSIUM SULFATE (โพแทสเซียมซัลเฟต)**

INS: 515(i)

Synonym: -

Functional Class: Acidity regulator

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559



## POTASSIUM SULFATE (โพแทสเซียมซัลเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559

## POTASSIUM SULFATE (โพแทสเซียมซัลเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## POWDERED CELLULOSE (เซลลูโลสผง)

INS: 460(ii)    Synonym: Cellulose    Functional Class: Anticaking agent, Bulking agent, Emulsifier, Glazing agent, Humectant, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	10000		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559

## POWDERED CELLULOSE (เซลลูโลสผง)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	16,XS36, XS92,XS95, XS165,XS190, XS191,XS292, XS312,XS315	2561

## POWDERED CELLULOSE (เซลลูโลสผง)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	16,XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4.1	Cooked fish and fish products	GMP	16,325	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	GMP	16	2559
09.2.4.3	Fried fish and fish products	GMP	41,325,332	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300,332	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559

## POWDERED CELLULOSE (เซลลูโลสผง)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## PROCESSED EUCHEUMA SEAWEED (สาหร่ายทะเลยูคิเมาแปรรูป)

INS: 407a      Synonym: PES; PNG-carrageenan; Semi-refined carrageenan      Functional Class: Bulking agent, Carrier, Emulsifier, Gelling agent, Glazing agent, Humectant, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559

## PROCESSED EUCHEUMA SEAWEED (สำหรับทะเลยูซีมาแปรรูป)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559

## PROCESSED EUCHEUMA SEAWEED (สำหรับทะเลยูคิมมาแปรรูป)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	332,391, XS36,XS92, XS95,XS190, XS191,XS292, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	177,332	2559
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.4.1	Cooked fish and fish products	GMP	16,325	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	GMP	16	2559
09.2.4.3	Fried fish and fish products	GMP	41,325,332	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300,332	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559

## PROCESSED EUCHEUMA SEAWEED (สำหรับทะเลยูซีมาแปรรูป)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## PROPIONIC ACID (กรดโพรพิโอนิก)

INS: 280      Synonym: Ethylformic acid; Methylacetic acid      Functional Class: Preservative

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP	TH1,TH4	2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559



## PROPIONIC ACID (กรดโพรพิโอนิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.6.6	Whey cheese	3000	70	2559
01.7	Dairy-based desserts	GMP	TH4,TH5	2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP	TH4	2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559

## PROPIONIC ACID (กรดโพรพิโอนิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP	TH6	2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP	TH6	2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**PROPYL GALLATE (โพรพิลแกลเลต)**

INS: 310      Synonym: Propyl ester of gallic acid      Functional Class: Antioxidant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.5.1	Milk powder and cream powder (plain)	200	15,75,196	2559
01.7	Dairy-based desserts	90	2,15	2559
02.1.1	Butter oil, anhydrous milkfat, ghee	100	15,133,171	2559
02.1.2	Vegetable oils and fats	200	15,130	2559
02.1.3	Animal oils and fats	200	15,130	2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	200	15,130	2559
02.3	Fat emulsions mainly of type oil-in- water	200	15,130	2559
02.4	Fat-based desserts	200	15,130	2559
04.1.2.9	Fruit-based desserts	90	2,15	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	50	15,76,196	2559
05.1	Cocoa products and chocolate products including imitations and chocolate substitutes	200	15,130,303,XS86, XS105,XS141	2559
05.2	Confectionery including candy, nougats and marzipans	200	15,130,XS309R	2561
05.3	Chewing gum	1000	130	2559
05.4	Decorations, toppings and sweet sauces	200	15,130	2559
06.1	Whole, broken, or flaked cereals and grains	100	15	2559
06.3	Breakfast cereals	200	15,196	2559
06.4.3	Pre-cooked pastas and noodles and like products	200	15,130,211	2559
06.5	Cereal and starch based desserts	90	2,15	2559
07.1.3	Other ordinary bakery products	100	15,130	2559
07.2.3	Mixes for fine bakery wares products of food categories 07.2.1-07.2.2	200	15,196	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	200	15,130, XS96,XS97	2559
08.3	Processed comminuted meat, poultry, and game products	200	15,130,XS88, XS89,XS98	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	100	15,196,XS311	2559

**PROPYL GALLATE (โพรพิลแกเลต)**

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
10.4	Egg-based desserts	90	2,15	2559
12.2	Herbs, spices, seasonings, and condiments	200	15,130	2559
12.5	Soups and broths	200	15,127,130	2559
12.6	Sauces and like products	200	15,130	2559
13.6	Food supplements	400	15,196	2559
14.1.4	Water-based flavoured drinks	1000	15,127	2559
15.1	Snacks - potato, cereal, flour or starch based	200	15,130	2559
15.2	Snacks - Processed nut or flavoured processed seed based	200	15,130	2559

**PROPYLENE GLYCOL (โพรพิลีนไกลคอล)**

INS: 1520      Synonym: Propanediol; Methyl glycol      Functional Class: Glazing agent, Humectant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	2000	XS240, XS314R	2559
06.4.3	Pre-cooked pastas and noodles and like products	10000	194	2559
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	1000	XS86	2561
05.2.1	Hard candy	5300		2561
05.2.2	Soft candy and other desserts, excluding products of food categories 01.7, 02.4, 04.1.2.9 and 06.5	4500	XS309R	2561
05.2.3	Nougats and marzipans	1000		2561
05.3	Chewing gum	20000		2561
07.1	Bread and ordinary bakery wares and mixes	1500		2559
07.2	Fine bakery wares and mixes	1500		2559

**PROPYLENE GLYCOL ALGINATE (โพรพิลีนไกลคอลแอลจิเนต)**

INS: 405	Synonym: 1,2-Propane-diol ester of alginic acid; Hydroxypropyl alginate; Propane 1,2- diol alginate	Functional Class: Bulking agent, Carrier, Emulsifier, Foaming agent, Gelling agent, Stabilizer, Thickener
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	1300	XS243	2561
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	5000	234,235	2561
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	5000	234	2561
01.3.2	Beverage whiteners	5000	XS250, XS252	2559
01.4.3	Clotted cream (plain)	5000		2559
01.4.4	Cream analogues	2500		2559
01.6.1	Unripened cheese	5000	XS262	2559
01.6.2.3	Cheese powder	16000	353	2559
01.6.5	Cheese analogues	9000		2559
01.7	Dairy-based desserts	6000		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	3000	359	2559
02.3	Fat emulsions mainly of type oil-in-water	3000		2559
03.0	Edible ices	10000		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	5000	XS240, XS314R	2559
04.1.2.9	Fruit-based desserts	6000		2559
04.1.2.11	Fruit fillings	5000		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	6000	386, XS38, XS260	2561
05.1.2	Cocoa mixes (syrops)	10000		2561
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	10000	XS86	2561
05.2	Confectionery including candy, nougats and marzipans	5000	XS309R	2561
05.3	Chewing gum	5000		2559
05.4	Decorations, toppings and sweet sauces	5000		2559
06.4.1	Fresh pastas and noodles and like products	10000	370, TH24	2561

**PROPYLENE GLYCOL ALGINATE (โพรพิลีนไกลคอลแอลจิเนต)**

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.4.2	Dried pastas and noodles and like products	5000	211	2559
06.4.3	Pre-cooked pastas and noodles and like products	5000	194,371	2559
07.1.1.1	Yeast-leavened breads and specialty breads	4000		2561
07.1.2	Crackers, excluding sweet crackers	2000		2561
07.1.5	Steamed breads and buns	500		2561
07.1.6	Mixes for bread and ordinary bakery wares products of food categories 07.1.1-07.1.5	20000	11	2561
07.2.1	Cakes, cookies and pies	3000		2561
07.2.2	Other fine bakery products	2000		2561
07.2.3	Mixes for fine bakery wares products of food categories 07.2.1-07.2.2	10000	11	2561
08.3	Processed comminuted meat, poultry, and game products	3000	XS88, XS89, XS98	2559

**PROPYLENE GLYCOL ESTERS OF FATTY ACIDS (โพรพิลีนไกลคอลเอสเทอร์ของกลุ่มกรดไขมัน)**

INS: 477      Synonym: Propane-1,2-diol esters of fatty acids      Functional Class: Emulsifier

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.3.2	Beverage whiteners	1000		2561
01.4.4	Cream analogues	5000	86	2559
01.5.2	Milk and cream powder analogues	100000		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	10000		2559
02.3	Fat emulsions mainly of type oil-in-water	30000		2559
04.1.2.11	Fruit fillings	40000		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	5000		2559
05.2	Confectionery including candy, nougats and marzipans	5000	XS309R	2561
05.3	Chewing gum	20000		2559
05.4	Decorations, toppings and sweet sauces	40000		2559

## PROPYLENE GLYCOL ESTERS OF FATTY ACIDS (โพรพิลีนไกลคอลเอสเทอร์ของกลุ่มกรดไขมัน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.5	Cereal and starch based desserts	5000		2561
07.0	Bakery wares	5000	11,72	2559
10.4	Egg-based desserts	5000		2561
11.4	Other sugars and syrups	5000		2559
13.3	Dietetic foods intended for special medical purposes	5000		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	5000		2559

 PROTEASE FROM *ASPERGILLUS ORYZAE* VAR. (เอนไซม์โปรตีนเอสจากเชื้อแอสเพอร์จิลลัส โอไรเซ)

INS: 1101(i)    Synonym: -    Functional Class: Flavour enhancer, Flour treatment agent, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559

PROTEASE FROM *ASPERGILLUS ORYZAE* VAR. (เอนไซม์โปรตีเอสจากเชื้อแอสเพอร์จิลลัส โอไรเซ)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.2.1	Flours	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559



PROTEASE FROM *ASPERGILLUS ORYZAE* VAR. (เอนไซม์โปรตีเอสจากเชื้อแอสเพอร์จิลลัส โอไรเซ)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**PULLULAN (พัลลูลาน)**

INS: 1204    Synonym: -    Functional Class: Glazing agent, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559

## PULLULAN (พัลลูแลน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.2.1	Flours	GMP	25	2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559

## PULLULAN (พัลลูแลน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41	2559
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559

## PULLULAN (พัลลูแลน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## QUILLAIA EXTRACTS (สารสกัดควิลลาเยา)

INS: 999(i)	Quillaia extract type I (สารสกัดควิลลาเยา แบบชนิด 1) Synonym: Quillaja extract; Soapbark extract; Quillay bark extract; Bois de Panama; Panama bark extract; Quillai extract	Functional Class: Emulsifier, Foaming agent		
INS: 999(ii)	Quillaia extract type II (สารสกัดควิลลาเยา แบบชนิด 2) Synonym: Quillaja extract; Soapbark extract; Quillay bark extract; Bois de Panama; Panama bark extract; Quillai extract	Functional Class: Emulsifier, Foaming agent		

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.4	Water-based flavoured drinks	50	127,132,293	2559

## QUINOLINE YELLOW (ควีนโนลีนเยลโลว์)

INS: 104	Synonym: CI Food Yellow 13; CI (1982) No. 47005	Functional Class: Colour		
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.5	Soups and broths	50	99	2559

**RIBOFLAVINS (กลุ่มไรโบฟลาวิน)**

INS: 101(i)	Riboflavin, synthetic (ไรโบฟลาวินสังเคราะห์) Synonym: Vitamin B2; Lactoflavin	Functional Class: Colour		
INS: 101(ii)	Riboflavin 5'-phosphate sodium (ไรโบฟลาวิน 5'-ฟอสเฟตโซเดียม) Synonym: Riboflavin 5'-phosphate ester monosodium salt; Vitamin B2 phosphate ester monosodium salt	Functional Class: Colour		
INS: 101(iii)	Riboflavin from <i>Bacillus subtilis</i> (ไรโบฟลาวินจากเชื้อ <i>บาซิลลัส ซับทีลิส</i> ) Synonym: Vitamin B2; lactoflavin	Functional Class: Colour		
FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.1	Unripened cheese	100		2559
01.6.2.1	Ripened cheese, includes rind	100		2559
01.6.2.2	Rind of ripened cheese	100		2559
01.6.4	Processed cheese	100		2559
01.6.5	Cheese analogues	100		2559
04.1.2.4	Canned or bottled fruit	70		2559
04.1.2.5	Jams, jellies and marmalades	70		2559
04.1.2.6	Fruit-based spreads for spread or raw materials	70		2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	70		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	70	182	2559
04.1.2.9	Fruit-based desserts	70		2559
04.1.2.10	Fermented fruit products	70		2559
04.1.2.11	Fruit fillings	70		2559
05.1.5	Imitation chocolate, chocolate substitute products	100		2559
05.2	Confectionery including candy, nougats and marzipans	100		2559
05.3	Chewing gum	100		2559
05.4	Decorations, toppings and sweet sauces	100		2559
06.3	Breakfast cereals	70		2559
06.5	Cereal and starch based desserts	70		2559
07.2	Fine bakery wares and mixes	70		2559

## RIBOFLAVINS (กลุ่มไรโบเฟลวิน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.4.1	Cooked fish and fish products	70	95	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	70		2559
09.3.3	Caviar and other fish roe products	100		2559
10.1	Fresh eggs	300	4	2559
10.4	Egg-based desserts	70		2559
11.4	Other sugars and syrups	70		2559
12.2.2	Seasonings and condiments	70		2559
12.4	Mustards	70		2559
12.5	Soups and broths	70	344	2559
12.6	Sauces and like products	70		2559
12.7	Salads and sandwich spreads	70		2559
12.9.1	Fermented soybean paste	30		2559
13.3	Dietetic foods intended for special medical purposes	100		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	100		2559
13.5	Dietetic foods	70		2559
13.6	Food supplements	300		2559
14.1.4	Water-based flavoured drinks	30	127	2559
14.2.2	Cider and perry	300		2559
14.2.4	Wines other than grape	300		2559
14.2.7	Aromatized alcoholic beverages	100		2559
15.1	Snacks - potato, cereal, flour or starch based	70		2559
15.2	Snacks - Processed nut or flavoured processed seed based	70		2559

## SACCHARINS (กลุ่มแซ็กคาริน)

INS: 954(i)	Saccharin (แซ็กคาริน) Synonym: -	Functional Class: Sweetener
INS: 954(ii)	Calcium saccharin (แคลเซียมแซ็กคาริน) Synonym: Calcium o-benzosulfimide	Functional Class: Sweetener
INS: 954(iii)	Potassium saccharin (โพแทสเซียมแซ็กคาริน) Synonym: Potassium o- benzosulfimide	Functional Class: Sweetener
INS: 954(iv)	Sodium saccharin (โซเดียมแซ็กคาริน) Synonym: Soluble saccharin; Sodium o-benzosulfimide	Functional Class: Sweetener

## SACCHARINS (กลุ่มแซ็กคาริน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	80	TH1	2559
01.6.5	Cheese analogues	100		2559
01.7	Dairy-based desserts	100		2559
02.4	Fat-based desserts	100		2559
03.0	Edible ices	100		2559
04.1.2.3	Fruit in vinegar, oil, or brine	160	144	2559
04.1.2.4	Canned or bottled fruit	200		2559
04.1.2.6	Fruit-based spreads for spread or raw materials	200		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	200		2559
04.1.2.9	Fruit-based desserts	100		2559
04.1.2.10	Fermented fruit products	160		2559
04.2.2.1	Frozen vegetables, seaweeds, nuts and seeds	500		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	500		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	160	144	2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	160	144	2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	160		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	200		2559
04.2.2.7	Fermented vegetable and seaweed products	200		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	160	144	2559
05.1.1	Cocoa mixes (powders), cocoa mass and cocoa cake	100	97,XS141	2559
05.1.2	Cocoa mixes (syrops)	80		2559
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	200	XS86	2559
05.1.4	Cocoa and chocolate products	500	TH2	2559
05.1.5	Imitation chocolate, chocolate substitute products	500		2559

## SACCHARINS (กลุ่มแซ็กคาริน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.2	Confectionery including candy, nougats and marzipans	500	163,XS309R	2561
05.3	Chewing gum	1200		2559
05.4	Decorations, toppings and sweet sauces	500		2559
06.3	Breakfast cereals	100		2559
06.5	Cereal and starch based desserts	100		2559
07.2	Fine bakery wares and mixes	170	165	2559
09.2.4.1	Cooked fish and fish products	500		2559
09.3.1	Fish and fish products marinated in vinegar or wine	160	144	2559
09.3.2	Pickled fish and fish products	160	144	2559
09.3.4	Semi-preserved fish and fish products, excluding products of food categories 09.3.1 - 09.3.3	160	144	2559
09.4	Fully preserved, including canned fish and fish products	200	144	2559
10.4	Egg-based desserts	100	144	2559
11.4	Other sugars and syrups	300	159	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.2	Seasonings and condiments	1500		2559
12.3	Vinegars	300		2559
12.4	Mustards	320		2559
12.5	Soups and broths	110	XS117	2559
12.6	Sauces and like products	160		2559
12.7	Salads and sandwich spreads	200	166	2559
12.9.1	Fermented soybean paste	200		2559
12.9.2.1	Fermented soybean sauce	500		2559
13.3	Dietetic foods intended for special medical purposes	200		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	300		2559
13.5	Dietetic foods	200		2559
13.6	Food supplements	1200		2559
14.1.3.1	Fruit nectar	80		2559
14.1.3.2	Vegetable nectar	80		2559
14.1.3.3	Concentrates for fruit nectar	80	127	2559



## SACCHARINS (กลุ่มแซ็กคาริน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.4.1	Carbonated water-based flavoured drinks	200	TH3	2559
14.1.4.2	Non-carbonated water-based flavoured drinks	200	TH3	2559
14.1.4.3	Concentrates (liquid or solid form) for water-based flavoured drinks	200	127,TH3	2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	200	127,160	2559
14.2.7	Aromatized alcoholic beverages	80		2559
15.0	Ready-to-eat savouries	100		2559

## SALTS OF MYRISTIC, PALMITIC AND STEARIC ACIDS WITH AMMONIA, CALCIUM, POTASSIUM AND SODIUM (กลุ่มเกลือแอมโมเนียม แคลเซียม โพแทสเซียม และโซเดียมของกรดไมริสติก แพลมมิติก และสเตียริก)

INS: 470(i)    Synonym: -    Functional Class: Anticaking agent, Emulsifier, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559

SALTS OF MYRISTIC, PALMITIC AND STEARIC ACIDS WITH AMMONIA, CALCIUM, POTASSIUM AND SODIUM  
(กลุ่มเกลือแอมโมเนียม แคลเซียม โพแทสเซียม และโซเดียมของกรดไมริสติก แพลมิติก และสเตียริก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,71,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	71,281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	71,29	2559

SALTS OF MYRISTIC, PALMITIC AND STEARIC ACIDS WITH AMMONIA, CALCIUM, POTASSIUM AND SODIUM  
(กลุ่มเกลือแอมโมเนียม แคลเซียม โพแทสเซียม และโซเดียมของกรดไมริสติก แพลมิติก และสเตียริก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	16,29,71	2559
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	71,258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.1	Salt	GMP	71	2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559

SALTS OF MYRISTIC, PALMITIC AND STEARIC ACIDS WITH AMMONIA, CALCIUM, POTASSIUM AND SODIUM  
(กลุ่มเกลือแอมโมเนียม แคลเซียม โพแทสเซียม และโซเดียมของกรดไมริสติก แพลมิติก และสเตียริก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

SALTS OF OLEIC ACID WITH CALCIUM, POTASSIUM AND SODIUM

(กลุ่มเกลือแคลเซียม โพแทสเซียม และโซเดียมของกรดโอเลอิก)

INS: 470(ii)    Synonym: -    Functional Class: Anticaking agent, Emulsifier, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559

## SALTS OF OLEIC ACID WITH CALCIUM, POTASSIUM AND SODIUM

(กลุ่มเกลือแคลเซียม โพแทสเซียม และโซเดียมของกรดโอเลอิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559

## SALTS OF OLEIC ACID WITH CALCIUM, POTASSIUM AND SODIUM

(กลุ่มเกลือแคลเซียม โพแทสเซียม และโซเดียมของกรดโอเลอิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	29	2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	16,29	2559
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559

## SALTS OF OLEIC ACID WITH CALCIUM, POTASSIUM AND SODIUM

(กลุ่มเกลือแคลเซียม โพแทสเซียม และโซเดียมของกรดโอเลอิก)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**SHELLAC, BLEACHED (เซลแล็กฟอกขาว)**

INS: 904      Synonym: -      Functional Class: Glazing agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.1.2	Surface-treated fresh fruit	GMP		2559
04.2.1.2	Surface-treated fresh vegetables, seaweeds, nuts and seeds	GMP	79	2559
05.1.4	Cocoa and chocolate products	GMP	3	2559
05.1.5	Imitation chocolate, chocolate substitute products	GMP	3	2559
05.2	Confectionery including candy, nougats and marzipans	GMP	3	2559
05.3	Chewing gum	GMP	3	2559
05.4	Decorations, toppings and sweet sauces	GMP		2559
07.2	Fine bakery wares and mixes	GMP	3	2559
13.6	Food supplements	GMP	3	2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	108	2559
15.0	Ready-to-eat savouries	GMP	3	2559

**SILICON DIOXIDE, AMORPHOUS (ซิลิคอนไดออกไซด์อสัณฐาน)**

INS: 551

Synonym: Silica

Functional Class: Anticaking agent, Foaming agent, Carrier

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	10000		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559



## SILICON DIOXIDE, AMORPHOUS (ซิลิคอนไดออกไซด์ออสัณฐาน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.1.2	Powdered sugar, powdered dextrose	15000	56	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.1	Salt	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	2000	65,318	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559

## SILICON DIOXIDE, AMORPHOUS (ซิลิคอนไดออกไซด์ออสัณฐาน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	321	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## SODIUM ACETATE (โซเดียมแอสีเตต)

INS: 262(i)    Synonym: -    Functional Class: Acidity regulator, Preservative, Sequestrant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559

## SODIUM ACETATE (โซเดียมแอสีเตต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	6000		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41	2559

## SODIUM ACETATE (โซเดียมแอสีเตต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4	Cooked and/or fried fish and fish products	GMP		2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	266,267,333	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	GMP	239,319,320	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559

## SODIUM ACETATE (โซเดียมแอสซีเตต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## SODIUM ALGinate (โซเดียมแอลจีเนต)

INS: 401      Synonym: Sodium salt of alginic acid      Functional Class: Bulking agent, Carrier, Emulsifier, Foaming agent, Gelling agent, Glazing agent, Humectant, Sequestrant, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559

## SODIUM ALGinate (โซเดียมแอลจีเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559

## SODIUM ALGINATE (โซเดียมแอลจีเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	37,332	2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	210,332	2559
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.4.1	Cooked fish and fish products	GMP	16,325	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	GMP	16,325	2559
09.2.4.3	Fried fish and fish products	GMP	41,325,332	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300,332	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559

## SODIUM ALGINATE (โซเดียมแอลจีเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## SODIUM ALUMINIUM PHOSPHATES (กลุ่มโซเดียมอะลูมิเนียมเฟอสเฟต)

INS: 541(i)	Sodium aluminium phosphate, acidic (โซเดียมอะลูมิเนียมเฟอสเฟตสภาพกรด) Synonym: SALP; Sodium trialuminium tetradecahydrogen octaphosphate tetrahydrate; Trisodium dialuminium pentadecahydrogen octaphosphate	Functional Class: Acidity regulator, Emulsifier, Emulsifying salt, Raising agent, Stabilizer, Thickener		
INS: 541(ii)	Sodium aluminium phosphate, basic (โซเดียมอะลูมิเนียมเฟอสเฟตสภาพด่าง) Synonym: Kasal	Functional Class: Acidity regulator, Emulsifier, Emulsifying salt, Stabilizer, Thickener		

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.4	Processed cheese	1600	6,251	2559
06.2.1	Flours	1600	6,252	2559
06.6	Batters	1000	6	2559
07.1.2	Crackers, excluding sweet crackers	100	6,246	2559
07.1.3	Other ordinary bakery products	100	6,244,246	2559
07.1.5	Steamed breads and buns	40	6,246,248	2559
07.1.6	Mixes for bread and ordinary bakery wares products of food categories 07.1.1-07.1.5	40	6,246,249	2559



**SODIUM ALUMINOSILICATE (โซเดียมอะลูมิโนซิลิเกต)**

INS: 554      Synonym: Sodium silicoaluminate      Functional Class: Anticaking agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	60	6,253	2559
01.3.2	Beverage whiteners	570	6,260	2559
01.5.1	Milk powder and cream powder (plain)	265	6,259	2559
01.5.2	Milk and cream powder analogues	570	6,259	2559
01.8.2	Dried whey and whey products	1140	6	2559
05.3	Chewing gum	100	6,174	2559
12.1.1	Salt	1000	6,254	2559
12.2.2	Seasonings and condiments	1000	6,255	2559
12.5.2	Mixes for soups and broths	570	6,XS117	2559
12.6.3	Mixes for sauces and gravies	570	6	2559

**SODIUM ASCORBATE (โซเดียมแอสคอร์เบต)**

INS: 301      Synonym: Sodium L-ascorbate      Functional Class: Antioxidant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.1.3	Peeled or cut fresh fruit	GMP		2559
04.1.2	Processed fruit	GMP		2559

## SODIUM ASCORBATE (โซเดียมแอสคอร์เบต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.1.3	Peeled, cut or shredded fresh vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.2.1	Flours	300		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP		2559
06.4.2	Dried pastas and noodles and like products	200	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.1.2	Fresh molluscs, crustaceans, and echinoderms	GMP	304,305,242	2559

## SODIUM ASCORBATE (โซเดียมแอสคอร์เบต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2	Processed fish and fish products	GMP	306,307	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP	314	2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.2	Follow-up formulae	50	70,72,315,316	2559
13.2	Complementary foods for infants and young children	500	317,319,320	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.2.1	Fruit juice	GMP		2559
14.1.2.3	Concentrates for fruit juice	GMP	127	2559
14.1.3.1	Fruit nectar	GMP		2559
14.1.3.3	Concentrates for fruit nectar	GMP	127	2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559

## SODIUM ASCORBATE (โซเดียมแอสคอร์เบต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## SODIUM CARBONATE (โซเดียมคาร์บอเนต)

INS: 500(i)      Synonym: Soda ash; Sodium salt of carbonic acid      Functional Class: Acidity regulator, Anticaking agent, Raising agent, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP		2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	GMP		2559
02.2.1	Butter	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559

## SODIUM CARBONATE (โซเดียมคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.2.2	Starches	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	10000		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559

## SODIUM CARBONATE (โซเดียมคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41	2559
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4	Cooked and/or fried fish and fish products	GMP		2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	266,267,333	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	2000	55,72	2559
13.1.2	Follow-up formulae	GMP	72,316	2559
13.1.3	Formulae for special medical purposes for infants	2000	55,72	2559
13.2	Complementary foods for infants and young children	GMP	240,243,295, 319,320	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559

## SODIUM CARBONATE (โซเดียมคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## SODIUM CARBOXYMETHYL CELLULOSE (โซเดียมคาร์บอกซิเมทิลเซลลูโลส)

INS: 466      Synonym: Sodium cellulose      Functional Class: Bulking agent, Emulsifier, glycolate; Na CMC; Cellulose gum; Sodium CMC; Sodium salt of carboxymethyl ether of cellulose      Firming agent, Gelling agent, Glazing agent, Humectant, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559

## SODIUM CARBOXYMETHYL CELLULOSE (โซเดียมคาร์บอกซีเมทิลเซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559



## SODIUM CARBOXYMETHYL CELLULOSE (โซเดียมคาร์บอกซีเมทิลเซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	37,332	2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	177,332	2559
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4.1	Cooked fish and fish products	GMP	16,325	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	GMP	16,325	2559
09.2.4.3	Fried fish and fish products	GMP	41,325,332	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300,332	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559

## SODIUM CARBOXYMETHYL CELLULOSE (โซเดียมคาร์บอกซีเมทิลเซลลูโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## SODIUM CARBOXYMETHYL CELLULOSE, ENZYMATICALLY HYDROLYZED

(โซเดียมคาร์บอกซีเมทิลเซลลูโลสชนิดย่อยสลายด้วยเอนไซม์)

INS: 469	Synonym: Enzymatically hydrolyzed carboxymethyl cellulose; CMC- ENZ; Carboxymethyl cellulose, sodium, partially enzymatically hydrolyzed	Functional Class: Stabilizer, Thickener
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559

## SODIUM CARBOXYMETHYL CELLULOSE, ENZYMATICALLY HYDROLYZED

(โซเดียมคาร์บอกซีเมทิลเซลลูโลสชนิดย่อยสลายด้วยเอนไซม์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559

## SODIUM CARBOXYMETHYL CELLULOSE, ENZYMATICALLY HYDROLYZED

(โซเดียมคาร์บอกซีเมทิลเซลลูโลสชนิดย่อยสลายด้วยเอนไซม์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559

## SODIUM CARBOXYMETHYL CELLULOSE, ENZYMATICALLY HYDROLYZED

(โซเดียมคาร์บอกซีเมทิลเซลลูโลสชนิดย่อยสลายด้วยเอนไซม์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## SODIUM DIACETATE (โซเดียมไดอะซีเตต)

INS: 262(ii)

Synonym: -

Functional Class: Acidity regulator, Preservative, Sequestrant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	1000	XS253	2559
02.3	Fat emulsions mainly of type oil-in-water	1000		2559
02.4	Fat-based desserts	1000		2559
05.2	Confectionery including candy, nougats and marzipans	1000	XS309R	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	1000	XS96, XS97	2559
08.3	Processed comminuted meat, poultry, and game products	1000	XS88, XS89, XS98	2559

## SODIUM DIHYDROGEN CITRATE (โซเดียมไดไฮโดรเจนซิเตรต)

INS: 331(i)

Synonym: Monosodium citrate; Sodium citrate monobasic

Functional Class: Acidity regulator, Emulsifier, Emulsifying salt, Sequestrant, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.3	Fluid Buttermilk (plain)	GMP	261	2559
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559

## SODIUM DIHYDROGEN CITRATE (โซเดียมไดไฮโดรเจนซิเตรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	GMP		2559
02.1.1	Butter oil, anhydrous milkfat, ghee	GMP	171	2559
02.1.2	Vegetable oils and fats	GMP	277	2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.1.1	Untreated fresh vegetables, seaweeds, nuts and seeds	GMP	262	2559
04.2.2.1	Frozen vegetables, seaweeds, nuts and seeds	GMP	29	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulpes and preparations	GMP		2559

## SODIUM DIHYDROGEN CITRATE (โซเดียมไดไฮโดรเจนซิเตรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2	Processed fish and fish products	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559

## SODIUM DIHYDROGEN CITRATE (โซเดียมไดไฮโดรเจนซิเตรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	GMP	55,72	2559
13.1.2	Follow-up formulae	GMP	72,316	2559
13.1.3	Formulae for special medical purposes for infants	GMP	55,72	2559
13.2	Complementary foods for infants and young children	5000	238,240,319,320	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559



**SODIUM DL-MALATE (โซเดียมดีแอล-มาเลต)**

INS: 350(ii)    Synonym: Malic acid sodium salt;    Functional Class: Acidity regulator, Humectant  
 Disodium DL-malate;  
 Hydroxybutanedioic acid  
 disodium salt

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559

## SODIUM DL-MALATE (โซเดียมดีแอล-มาเลต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41	2559
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4	Cooked and/or fried fish and fish products	GMP		2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	266,267,333	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559

## SODIUM DL-MALATE (โซเดียมดีแอล-มาเลต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## SODIUM ERYTHORBATE (โซเดียมอีริทอร์เบต)

INS: 316

Synonym: Sodium isoascorbate;  
Sodium D-isoascorbic acid

Functional Class: Antioxidant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559

## SODIUM ERYTHORBATE (โซเดียมเอริทอร์เบต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP	280	2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559

## SODIUM ERYTHORBATE (โซเดียมเอริทอร์เบต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.4	Edible casings	GMP		2559
09.1.2	Fresh molluscs, crustaceans, and echinoderms	GMP	304,305,242	2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	308	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559

## SODIUM ERYTHORBATE (โซเดียมเอริทอร์เบต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## SODIUM FUMARATES (โซเดียมฟูมาเรต)

INS: 365      Synonym: Monosodium fumarate;      Functional Class: Acidity regulator

Monosodium trans-butenedioic acid; Monosodium trans-1,2-ethylenedicarboxylate; Monosodium trans-1,2-ethylenedicarboxylic acid

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559

## SODIUM FUMARATES (โซเดียมฟูมาเรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41	2559
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4	Cooked and/or fried fish and fish products	GMP		2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	266,267	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559

## SODIUM FUMARATES (โซเดียมฟูมาเรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## SODIUM GLUCONATE (โซเดียมกลูโคเนต)

INS: 576

Synonym: Sodium D-gluconate

Functional Class: Sequestrant, Stabilizer,  
Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559



## SODIUM GLUCONATE (โซเดียมกลูโคเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559

## SODIUM GLUCONATE (โซเดียมกลูโคเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2	Processed fish and fish products	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559

## SODIUM GLUCONATE (โซเดียมกลูโคเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## SODIUM HYDROGEN CARBONATE (โซเดียมไฮโดรเจนคาร์บอเนต)

INS: 500(ii)    Synonym: Baking soda; Bicarbonate of soda; Sodium bicarbonate; Sodium acid carbonate    Functional Class: Acidity regulator, Anticaking agent, Raising agent, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP		2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559

## SODIUM HYDROGEN CARBONATE (โซเดียมไฮโดรเจนคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.8.2	Dried whey and whey products	GMP		2559
02.2.1	Butter	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559

## SODIUM HYDROGEN CARBONATE (โซเดียมไฮโดรเจนคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	2000	55,72	2559
13.1.2	Follow-up formulae	GMP	72,316	2559
13.1.3	Formulae for special medical purposes for infants	2000	55,72	2559
13.2	Complementary foods for infants and young children	GMP	240,319,320	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559

## SODIUM HYDROGEN CARBONATE (โซเดียมไฮโดรเจนคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## SODIUM HYDROGEN DL-MALATE (โซเดียมไฮโดรเจนดีแอล-มาเลต)

INS: 350(i)	Synonym: Malic acid monosodium salt; Monosodium DL-malate; 2-hydroxybutanedioic acid monosodium salt	Functional Class: Acidity regulator, Humectant		
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559

## SODIUM HYDROGEN DL-MALATE (โซเดียมไฮโดรเจนดีแอล-มาเลต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559

## SODIUM HYDROGEN DL-MALATE (โซเดียมไฮโดรเจนดีแอล-มาเลต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## SODIUM HYDROGEN SULFATE (โซเดียมไฮโดรเจนซัลเฟต)

INS: 514(ii)    Synonym: Sodium acid sulfate; Nitre cake; Sodium bisulfate; Sulfuric acid, Monosodium salt    Functional Class: Acidity regulator

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559



## SODIUM HYDROGEN SULFATE (โซเดียมไฮโดรเจนซัลเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559

## SODIUM HYDROGEN SULFATE (โซเดียมไฮโดรเจนซัลเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**SODIUM HYDROXIDE (โซเดียมไฮดรอกไซด์)**

INS: 524      Synonym: Caustic soda; Lye; Sodium      Functional Class: Acidity regulator  
hydrate

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	GMP		2559
02.2.1	Butter	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559

## SODIUM HYDROXIDE (โซเดียมไฮดรอกไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	2000	55,72	2559
13.1.2	Follow-up formulae	GMP	72,316	2559
13.1.3	Formulae for special medical purposes for infants	2000	55,72	2559
13.2	Complementary foods for infants and young children	GMP	239,319,320	2559

## SODIUM HYDROXIDE (โซเดียมไฮดรอกไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## SODIUM LACTATE (โซเดียมแล็กเตต)

INS: 325      Synonym: Sodium 2-hydroxypropanoate      Functional Class: Acidity regulator, Antioxidant, Bulking agent, Emulsifier, Emulsifying salt, Humectant, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.3	Fluid Buttermilk (plain)	GMP	261	2559
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP		2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559

## SODIUM LACTATE (โซเดียมแล็กเตต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559

## SODIUM LACTATE (โซเดียมแล็กเตต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41	2559
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4	Cooked and/or fried fish and fish products	GMP		2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	266,267,333	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	GMP	83,239,319,320	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559

## SODIUM LACTATE (โซเดียมแล็กเตต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## SODIUM PROPIONATE (โซเดียมโพรพิโอเนต)

INS: 281

Synonym: -

Functional Class: Preservative

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP	TH1,TH4	2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.6.6	Whey cheese	3000	70	2559
01.7	Dairy-based desserts	GMP	TH4,TH5	2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559



## SODIUM PROPIONATE (โซเดียมโพรพิโอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP	TH4	2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP	TH6	2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559

## SODIUM PROPIONATE (โซเดียมโพรพิโอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP	TH6	2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## SODIUM SESQUICARBONATE (โซเดียมเซสควิคาร์บอเนต)

INS: 500(iii)	Synonym: Sodium monohydrogendicarbonate; Sodium salt of carbonic acid	Functional Class: Acidity regulator, Anticaking agent, Raising agent
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP		2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559

## SODIUM SESQUICARBONATE (โซเดียมเซสควิคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559

## SODIUM SESQUICARBONATE (โซเดียมเซสควิคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	41	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559

## SODIUM SESQUICARBONATE (โซเดียมเซสควิคาร์บอเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## SODIUM SULFATE (โซเดียมซัลเฟต)

INS: 514(i)    Synonym: Glauber's salt (decahydrate from)    Functional Class: Acidity regulator

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559

## SODIUM SULFATE (โซเดียมซัลเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559

## SODIUM SULFATE (โซเดียมซัลเฟต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## SORBATES (กลุ่มซอร์เบต)

INS: 200	Sorbic acid (กรดซอร์บิก) Synonym: 2,4-hexadienoic acid; 2-propenylacrylic acid	Functional Class: Preservative		
INS: 201	Sodium sorbate (โซเดียมซอร์เบต) Synonym: Sodium salt of trans, trans- 2,4-hexadienoic acid	Functional Class: Preservative		
INS: 202	Potassium sorbate (โพแทสเซียมซอร์เบต) Synonym: Potassium salt of trans, trans-2,4-hexadienoic acid	Functional Class: Preservative		
INS: 203	Calcium sorbate (แคลเซียมซอร์เบต) Synonym: Calcium salt of trans, trans- 2,4-hexadienoic acid	Functional Class: Preservative		

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	1000	42,220,TH1,TH5	2559
01.2.2	Renneted milk (plain)	1000	42	2559
01.3.2	Beverage whiteners	200	42	2559
01.6.1	Unripened cheese	1000	42,223	2559
01.6.2	Ripened cheese	3000	42	2559
01.6.3	Whey cheese	1000	42	2559
01.6.4	Processed cheese	3000	42	2559

## SORBATES (กลุ่มซอร์เบต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.5	Cheese analogues	3000	3,42	2559
01.6.6	Whey cheese	3000	42	2559
01.7	Dairy-based desserts	1000	42,TH4,TH5	2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	2000	42	2559
02.3	Fat emulsions mainly of type oil-in-water	1000	42	2559
02.4	Fat-based desserts	1000	42,TH4	2559
04.1.2.2	Dried fruit	500	42	2559
04.1.2.3	Fruit in vinegar, oil, or brine	1000	42	2559
04.1.2.5	Jams, jellies and marmalades	1000	42	2559
04.1.2.6	Fruit-based spreads for spread or raw materials	1000	42	2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	500	42	2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	1000	42	2559
04.1.2.9	Fruit-based desserts	1000	42	2559
04.1.2.10	Fermented fruit products	1000	42	2559
04.1.2.11	Fruit fillings	1000	42	2559
04.1.2.12	Cooked fruit	1200	42	2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	1000	42	2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	1000	42	2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	1000	42	2559
04.2.2.7	Fermented vegetable and seaweed products	1000	42	2559
04.2.2.8	Cooked or fried vegetables and seaweeds	1000	42,221	2559
05.1.2	Cocoa mixes (syrops)	1000	42	2559
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	1000	42,XS86	2559
05.1.5	Imitation chocolate, chocolate substitute products	1500	42	2559
05.2	Confectionery including candy, nougats and marzipans	1500	42	2559



## SORBATES (กลุ่มซอร์เบต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.3	Chewing gum	1500	42	2559
05.4	Decorations, toppings and sweet sauces	1000	42	2559
06.4.3	Pre-cooked pastas and noodles and like products	2000	42,211	2559
06.5	Cereal and starch based desserts	1000	42	2559
06.6	Batters	2000	42	2559
07.0	Bakery wares	1000	42	2559
08.2.1.1	Cured (including salted) non-heat treated processed meat, poultry, and game products in whole pieces or cuts	200	3,42,TH20	2559
08.2.1.2	Cured (including salted) and dried non-heat treated processed meat, poultry, and game products in whole pieces or cuts	2000	3,42	2559
08.2.1.3	Fermented non-heat treated processed meat, poultry, and game products in whole pieces or cuts	200	3,42,TH20	2559
08.2.2	Heat-treated processed meat, poultry, and game products in whole pieces or cuts	200	3,42,XS96,XS97, TH20	2559
08.2.3	Frozen processed meat, poultry and game products in whole pieces or cuts	200	3,42	2559
08.3	Processed comminuted meat, poultry, and game products	1500	42,XS88,XS89, XS98,TH20	2559
08.4	Edible casings	10000	42,222,365	2559
09.2.4.1	Cooked fish and fish products	2000	42	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	2000	42,82	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	1000	42	2559
09.3	Semi-preserved fish and fish products	1000	42	2559
10.2.1	Liquid egg products	5000	42	2559
10.2.2	Frozen egg products	1000	42	2559
10.2.3	Dried and/or heat coagulated egg products	1000	42	2559
10.4	Egg-based desserts	1000	42	2559
11.4	Other sugars and syrups	1000	42	2559
11.6	Table-top sweeteners directly sold to consumers	1000	42,192	2559

## SORBATES (กลุ่มซอร์เบต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.2	Herbs, spices, seasonings, and condiments	1000	42	2559
12.4	Mustards	1000	42	2559
12.5	Soups and broths	1000	42,338,339,TH6	2559
12.6	Sauces and like products	1000	42,127	2559
12.7	Salads and sandwich spreads	1500	42	2559
12.9.1	Fermented soybean paste	1000	42	2559
12.9.2.1	Fermented soybean sauce	1000	42	2559
12.9.2.3	Other soybean sauces, excluding products of food categories 12.9.2.1 and 12.9.2.2	1000	42	2559
13.3	Dietetic foods intended for special medical purposes	1500	42	2559
13.4	Dietetic formulae for slimming purposes and weight reduction	1500	42	2559
13.5	Dietetic foods	1500	42	2559
13.6	Food supplements	2000	42	2559
14.1.2.1	Fruit juice	200	42,91,122	2559
14.1.2.3	Concentrates for fruit juice	200	42,91,122,127	2559
14.1.3.1	Fruit nectar	200	42,91,122	2559
14.1.3.3	Concentrates for fruit nectar	200	42,91,122,127	2559
14.1.4	Water-based flavoured drinks	200	42,127	2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	200	42,127,160	2559
14.2.2	Cider and perry	500	42	2559
14.2.3	Grape wines	200	42	2559
14.2.4	Wines other than grape	500	42	2559
14.2.5	Mead	200	42	2559
14.2.7	Aromatized alcoholic beverages	500	42,224	2559
15.1	Snacks - potato, cereal, flour or starch based	1000	42	2559
15.2	Snacks - Processed nut or flavoured processed seed based	1000	42	2559

**SORBITAN ESTERS OF FATTY ACIDS (กลุ่มซอร์บิแทนเอสเทอร์ของกรดไขมัน)**

INS: 491	Sorbitan monostearate (ซอร์บิแทนมอโนสเตียเรต) Synonym: -	Functional Class: Emulsifier
INS: 492	Sorbitan tristearate (ซอร์บิแทนไตรสเตียเรต) Synonym: -	Functional Class: Emulsifier, Stabilizer
INS: 493	Sorbitan monolaurate (ซอร์บิแทนมอโนลอเรต) Synonym: Sorbitan laurate	Functional Class: Emulsifier, Stabilizer
INS: 494	Sorbitan monooleate (ซอร์บิแทนมอโนโอเลอเตต) Synonym: -	Functional Class: Emulsifier, Stabilizer
INS: 495	Sorbitan monopalmitate (ซอร์บิแทนมอโนแพลมิเตต) Synonym: -	Functional Class: Emulsifier

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.3.2	Beverage whiteners	4000	XS250, XS252	2559
01.4.4	Cream analogues	5000	349	2559
01.5.2	Milk and cream powder analogues	4000	XS251	2559
01.7	Dairy-based desserts	2500	XS243	2561
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	10000	359	2559
02.3	Fat emulsions mainly of type oil-in- water	5000	363	2559
02.4	Fat-based desserts	5000		2559
03.0	Edible ices	500		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	5000	XS240, XS314R	2559
04.1.2.9	Fruit-based desserts	2500		2561
04.1.2.11	Fruit fillings	5000		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	5000	76	2559
05.1.1	Cocoa mixes (powders), cocoa mass and cocoa cake	2000	97,123, XS141	2559
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	10000	XS86	2561
05.1.4	Cocoa and chocolate products	10000	101	2559
05.1.5	Imitation chocolate, chocolate substitute products	10000		2561

## SORBITAN ESTERS OF FATTY ACIDS (กลุ่มซอร์บิแทนเอสเทอร์ของกรดไขมัน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
05.2.1	Hard candy	10000		2561
05.2.2	Soft candy and other desserts, excluding products of food categories 01.7, 02.4, 04.1.2.9 and 06.5	10000	XS309R	2561
05.2.3	Nougats and marzipans	10000		2561
05.3	Chewing gum	5000		2559
05.4	Decorations, toppings and sweet sauces	10000		2559
06.5	Cereal and starch based desserts	5000		2559
07.1.1	Breads and rolls	3000		2561
07.1.2	Crackers, excluding sweet crackers	5000	11	2559
07.1.3	Other ordinary bakery products	5000	11	2559
07.1.4	Bread-type products	5000	11	2559
07.1.6	Mixes for bread and ordinary bakery wares products of food categories 07.1.1-07.1.5	10000	11	2559
07.2.1	Cakes, cookies and pies	5000	TH25	2561
07.2.2	Other fine bakery products	5000		2561
07.2.3	Mixes for fine bakery wares products of food categories 07.2.1-07.2.2	5000	TH26	2561

## SORBITOL (ซอร์บิทอล)

INS: 420(i)	Synonym: D-Glucitol, D-sorbitol, Sorbit, Sorbol	Functional Class: Bulking agent, Humectant, Sequestrant, Stabilizer, Sweetener, Thickener
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559

## SORBITOL (ซอร์บิทอล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	40000	TH27	2561
09.3	Semi-preserved fish and fish products	GMP		2559

## SORBITOL (ซอร์บิทอล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**SORBITOL SYRUP (ซอร์บิทอลไซรัป)**

INS: 420(ii)    Synonym: D-Glucitol syrup

Functional Class: Bulking agent, Humectant,  
Sequestrant, Stabilizer, Sweetener,  
Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559

## SORBITOL SYRUP (ซอร์บิทอลไซรัป)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559



## SORBITOL SYRUP (ซอร์บิทอลไซรัป)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## STANNOUS CHLORIDE (สแตนนัสคลอไรด์)

INS: 512	Synonym: Tin dichloride; Tin (II) chloride; Stannous chloride dihydrate	Functional Class: Antioxidant, Colour retention agent
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.2.4	Canned or bottled fruit Canned or bottled or retort pouch	20	43	2559
04.2.2.4	vegetables and seaweeds	25	43	2559
14.1.4	Water-based flavoured drinks	20	43,127	2559

## STARCH ACETATE (สตาร์ชแอซีเตต)

INS: 1420	Synonym: -	Functional Class: Emulsifier, Stabilizer, Thickener
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FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559

## STARCH ACETATE (สตาร์ชแอซีเทต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP		2561
06.4.2	Dried pastas and noodles and like products	GMP		2561
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559

## STARCH ACETATE (สตาร์ชแอซีเทต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	63	2559
09.2.4.1	Cooked fish and fish products	GMP		2561
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	50000	239,269	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559

## STARCH ACETATE (สตาร์ชแอซีเทต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## STARCH SODIUM OCTENYL SUCCINATE (สตาร์ชโซเดียมออกทีนิลซัคซิเนต)

INS: 1450    Synonym: -    Functional Class: Emulsifier, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559

## STARCH SODIUM OCTENYL SUCCINATE (สตาร์ชโซเดียมออกทีนิลซัคซิเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559

## STARCH SODIUM OCTENYL SUCCINATE (สตาร์ชโซเดียมออกทีนิลซัคซิเนต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.3	Formulae for special medical purposes for infants	20000	376,381	2559
13.2	Complementary foods for infants and young children	50000	239,269	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**STARCHES, ENZYME TREATED (เอนไซม์ที่รีเทคสตาร์ช)**

INS: 1405

Synonym: -

Functional Class: Emulsifier, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat-treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559

## STARCHES, ENZYME TREATED (เอนไซม์ที่รีเทคสตาร์ช)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559



## STARCHES, ENZYME TREATED (เอนไซม์ที่รีเทคสตาร์ช)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## STEAROYL LACTYLATES (กลุ่มสเตียโรอิลแล็กทิลเลต)

INS: 481(i)	Sodium stearoyl lactylate (โซเตียมสเตียโรอิลแล็กทิลเลต) Synonym: Sodium Stearoyl-2-lactylate; Sodium stearoyl lactate; Sodium di-2-stearoyl lactate	Functional Class: Emulsifier, Flour treatment agent, Foaming agent, Stabilizer	
INS: 482(i)	Calcium stearoyl lactylate (แคลเซียมสเตียโรอิลแล็กทิลเลต) Synonym: Calcium Stearoyl-2-lactylate, Calcium stearoyl lactate; Calcium di-2-stearoyl lactate	Functional Class: Emulsifier, Flour treatment agent, Foaming agent, Stabilizer	

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.3.2	Beverage whiteners	3000	XS250, XS252	2559
01.4.4	Cream analogues	5000	2	2559
01.6.5	Cheese analogues	2000		2559
01.7	Dairy-based desserts	3000		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	10000		2559

## STEAROYL LACTYLATES (กลุ่มสเตียโรอิลแล็กทิลเตต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.3	Fat emulsions mainly of type oil-in-water	3000		2559
02.4	Fat-based desserts	3000		2559
03.0	Edible ices	5000	15	2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	2000	XS240, XS314R	2559
04.1.2.9	Fruit-based desserts	3000		2559
04.1.2.11	Fruit fillings	2000		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	5000	76	2559
05.2	Confectionery including candy, nougats and marzipans	3000	XS309R	2559
05.3	Chewing gum	2000		2559
05.4	Decorations, toppings and sweet sauces	2000		2559
06.2.1	Flours	5000	186	2559
06.3	Breakfast cereals	5000		2559
06.4.3	Pre-cooked pastas and noodles and like products	3000		2559
06.5	Cereal and starch based desserts	5000		2559
07.1.1.1	Yeast-leavened breads and specialty breads	3000	388	2561
07.1.1.2	Soda breads	3000		2559
07.1.2	Crackers, excluding sweet crackers	3000		2559
07.1.3	Other ordinary bakery products	5000		2559
07.1.4	Bread-type products	5000		2559
07.1.5	Steamed breads and buns	3000		2559
07.1.6	Mixes for bread and ordinary bakery wares products of food categories 07.1.1-07.1.5	5000		2559
07.2	Fine bakery wares and mixes	4000		2559

## STEARYL CITRATE (สเตียริลซิเตรต)

INS: 484

Synonym: -

Functional Class: Antioxidant, Emulsifier, Sequestrant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.1.2	Vegetable oils and fats	GMP		2559

## STEARYL CITRATE (สเตียริลซิเตรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.1.3	Animal oils and fats	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	100	15	2559
05.3	Chewing gum	15000		2559
14.1.4	Water-based flavoured drinks	500	127	2559

## STEVIOLE GLYCOSIDES (สตีวียอลไกลโคไซด์)

INS: 960

Synonym: -

Functional Class: Sweetener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	70	26,201,TH1	2559
01.5.2	Milk and cream powder analogues	330	26,201	2559
01.7	Dairy-based desserts	330	26	2559
02.4	Fat-based desserts	330	26	2559
03.0	Edible ices	270	26	2559
04.1.2.3	Fruit in vinegar, oil, or brine	100	26	2559
04.1.2.4	Canned or bottled fruit	330	26	2559
04.1.2.6	Fruit-based spreads for spread or raw materials	330	26	2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	40	26	2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	330	26	2559
04.1.2.9	Fruit-based desserts	350	26	2559
04.1.2.10	Fermented fruit products	115	26	2559
04.1.2.11	Fruit fillings	330	26	2559
04.1.2.12	Cooked fruit	40	26	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	40	26	2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	330	26	2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	70	26	2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	330	26	2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	165	26	2559

## STEVIOL GLYCOSIDES (สตีวียออลไกลโคไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.7	Fermented vegetable and seaweed products	200	26	2559
04.2.2.8	Cooked or fried vegetables and seaweeds	40	26	2559
05.2	Confectionery including candy, nougats and marzipans	700	26,199	2559
05.3	Chewing gum	1100	26	2559
06.3	Breakfast cereals	350	26	2559
06.5	Cereal and starch based desserts	165	26	2559
06.8.1	Soybean-based beverages	100	26	2559
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	100	26,202,XS88, XS89,XS98	2559
09.3.1	Fish and fish products marinated in vinegar or wine	100	26,144	2559
09.3.2	Pickled fish and fish products	165	26	2559
09.3.3	Caviar and other fish roe products	100	26	2559
09.4	Fully preserved, including canned fish and fish products	100	26	2559
10.4	Egg-based desserts	330	26	2559
11.6	Table-top sweeteners directly sold to consumers	GMP	26	2559
12.2.2	Seasonings and condiments	30	26	2559
12.4	Mustards	130	26	2559
12.5	Soups and broths	50	26,XS117	2559
12.6.1	Emulsified sauces and dips	350	26	2559
12.6.2	Non-emulsified sauces	350	26	2559
12.6.3	Mixes for sauces and gravies	350	26,127	2559
12.6.4	Clear sauces	350	26	2559
12.7	Salads and sandwich spreads	115	26	2559
12.9.2.1	Fermented soybean sauce	30	26	2559
12.9.2.2	Non-fermented soybean sauce	165	26	2559
12.9.2.3	Other soybean sauces, excluding products of food categories 12.9.2.1 and 12.9.2.2	165	26	2559
13.3	Dietetic foods intended for special medical purposes	350	26	2559
13.4	Dietetic formulae for slimming purposes and weight reduction	270	26	2559
13.5	Dietetic foods	660	26,198,294	2559

## STEVIOLE GLYCOSIDES (สตีวียอลไกลโคไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.6	Food supplements	2500	26,203,TH28	2561
14.1.3	Fruit and vegetable nectars	200	26	2559
14.1.4	Water-based flavoured drinks	115	26,127,TH3	2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	200	26,127,160	2559
14.2.7	Aromatized alcoholic beverages	200	26	2559
15.0	Ready-to-eat savouries	170	26	2559

## SUCCINIC ACID (กรดซัคซินิก)

INS: 363      Synonym: -

Functional Class: Flavour enhancer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
12.6	Sauces and like products	100000		2559

## SUCRALOSE (ซูคราโลส)

INS: 955      Synonym: 4,1',6'-trichlorogalactosucrose

Functional Class: Sweetener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	300	TH1	2559
01.3.2	Beverage whiteners	580		2559
01.4.4	Cream analogues	580		2559
01.6.5	Cheese analogues	500		2559
01.7	Dairy-based desserts	400		2559
02.4	Fat-based desserts	400		2559
03.0	Edible ices	320		2559
04.1.2.1	Frozen fruit	400		2559
04.1.2.2	Dried fruit	1500		2559
04.1.2.3	Fruit in vinegar, oil, or brine	180	144	2559
04.1.2.4	Canned or bottled fruit	400		2559
04.1.2.6	Fruit-based spreads for spread or raw materials	400		2559

## SUCRALOSE (ซูคราโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	800		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	400		2559
04.1.2.9	Fruit-based desserts	400		2559
04.1.2.10	Fermented fruit products	150		2559
04.1.2.11	Fruit fillings	400		2559
04.1.2.12	Cooked fruit	150		2559
04.2.2.1	Frozen vegetables, seaweeds, nuts and seeds	150		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	580		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	400		
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	580		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	400	169	2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	400		2559
04.2.2.7	Fermented vegetable and seaweed products	580		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	150	144	2559
05.1.1	Cocoa mixes (powders), cocoa mass and cocoa cake	500	97,XS141	2559
05.1.2	Cocoa mixes (syrops)	400	97	2559
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	400	169,XS86	2559
05.1.4	Cocoa and chocolate products	800	TH2	2559
05.1.5	Imitation chocolate, chocolate substitute products	800		2559
05.2	Confectionery including candy, nougats and marzipans	1800	164	2559
05.3	Chewing gum	5000		2559
05.4	Decorations, toppings and sweet sauces	1000		2559
06.3	Breakfast cereals	1000		2559

## SUCRALOSE (ซูคราโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.5	Cereal and starch based desserts	400		2559
06.7	Pre-cooked or processed rice products	200	72	2559
06.8.1	Soybean-based beverages	400		2559
07.1	Bread and ordinary bakery wares and mixes	650		2559
07.2	Fine bakery wares and mixes	700	165	2559
09.3	Semi-preserved fish and fish products	120	144	2559
09.4	Fully preserved, including canned fish and fish products	120	144	2559
10.4	Egg-based desserts	400		2559
11.4	Other sugars and syrups	1500	159	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices	400		2559
12.2.2	Seasonings and condiments	700		2559
12.3	Vinegars	400		2559
12.4	Mustards	140		2559
12.5	Soups and broths	600	XS117	2559
12.6	Sauces and like products	450	127	2559
12.7	Salads and sandwich spreads	1250	169	2559
13.3	Dietetic foods intended for special medical purposes	400		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	320		2559
13.5	Dietetic foods	400		2559
13.6	Food supplements	2400		2559
14.1.3.1	Fruit nectar	300		2559
14.1.3.2	Vegetable nectar	300		2559
14.1.3.3	Concentrates for fruit nectar	300	127	2559
14.1.3.4	Concentrates for vegetable nectar	300	127	2559
14.1.4	Water-based flavoured drinks	300	127,TH3	2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	300	127,160	2559
14.2.7	Aromatized alcoholic beverages	700		2559
15.0	Ready-to-eat savouries	1000		2559

**SUCROGLYCERIDES (ซูโครกลีเซอไรต์)**

INS: 474

Synonym: -

Functional Class: Emulsifier

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.3.2	Beverage whiteners	10000	348,XS250, XS252	2561
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	5000	348	2559
01.4.4	Cream analogues	10000	348	2559
01.5.1	Milk powder and cream powder (plain)	10000		2559
01.7	Dairy-based desserts	3000	348,XS243	2561
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	10000	348,360	2559
02.3	Fat emulsions mainly of type oil-in- water	5000	102,363	2559
02.4	Fat-based desserts	3000	348	2561
03.0	Edible ices	3000	348	2561
04.1.1.2	Surface-treated fresh fruit	GMP		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	1500	348,XS314R	
04.1.2.9	Fruit-based desserts	2000	348	2561
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	5000		2559
05.1.2	Cocoa mixes (syrups)	10000	348	2561
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	10000	348	2561
05.1.5	Imitation chocolate, chocolate substitute products	6000	348	
05.2	Confectionery including candy, nougats and marzipans	5000	348,XS309R	2561
05.3	Chewing gum	10000	348	2559
05.4	Decorations, toppings and sweet sauces	5000	348	2559
06.4.3	Pre-cooked pastas and noodles and like products	2000	194,348	2559
06.5	Cereal and starch based desserts	3000	348	2561
06.6	Batters	10000	348	2559
06.7	Pre-cooked or processed rice products	10000	348	2559



## SUCROGLYCERIDES (ซูโครกลีเซอไรด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
07.1	Bread and ordinary bakery wares and mixes	3000	348	2561
07.2.1	Cakes, cookies and pies	5000	348,TH25	2561
07.2.2	Other fine bakery products	5000	348	2561
07.2.3	Mixes for fine bakery wares products of food categories 07.2.1-07.2.2	5000	348,TH26	2561
08.2.2	Heat-treated processed meat, poultry, and game products in whole pieces or cuts	5000	15,XS96,XS97	2559
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	5000	15,XS88, XS89,XS98	2559
10.4	Egg-based desserts	5000		2559
12.5	Soups and broths	2000	345	2559
12.6	Sauces and like products	10000		2559
13.3	Dietetic foods intended for special medical purposes	5000		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	5000		2559
13.6	Food supplements	2500		2559
14.1.4	Water-based flavoured drinks	200	127,219	2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	1000	127,176	2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	5000		2559
14.2.7	Aromatized alcoholic beverages	5000		2559

## SUCROSE ACETATE ISOBUTYRATE (ซูโครสแอสีเตตไอโซบิวทีเรต)

INS: 444      Synonym: SAIB      Functional Class: Emulsifier, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.4	Water-based flavoured drinks	500	127	2559

**SUCROSE ESTERS OF FATTY ACIDS (ซูโครสเอสเทอร์ของกรดไขมัน)**

INS: 473      Synonym: Sucrose fatty acid esters      Functional Class: Stabilizer, Emulsifier, Foaming agent, Glazing agent

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.3.2	Beverage whiteners	10000	348,XS250, XS252	2561
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	5000	348	2559
01.4.4	Cream analogues	10000	348	2561
01.5.2	Milk and cream powder analogues	5000	350	2559
01.6.5	Cheese analogues	10000		2559
01.7	Dairy-based desserts	3000	348,XS243	2561
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	10000	348,360	2559
02.3	Fat emulsions mainly of type oil-in-water	5000	102,363	2559
02.4	Fat-based desserts	3000	348	2561
03.0	Edible ices	3000	348	2561
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	1500	348,XS314R	2559
04.1.2.9	Fruit-based desserts	2000	348	2561
05.1.2	Cocoa mixes (syrups)	10000	348	2561
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	10000	348	2561
05.1.5	Imitation chocolate, chocolate substitute products	6000	348	2561
05.2	Confectionery including candy, nougats and marzipans	5000	348,XS309R	2561
05.3	Chewing gum	10000	348	2561
05.4	Decorations, toppings and sweet sauces	5000	348	2559
06.3	Breakfast cereals	2000		2559
06.5	Cereal and starch based desserts	3000	348	2561
06.6	Batters	10000	348	2559
06.7	Pre-cooked or processed rice products	10000	348	2559
07.1	Bread and ordinary bakery wares and mixes	3000	348	2561

## SUCROSE ESTERS OF FATTY ACIDS (ซูโครสเอสเทอร์ของกรดไขมัน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
07.2.1	Cakes, cookies and pies	5000	348,TH25	2561
07.2.2	Other fine bakery products	5000	348	2561
07.2.3	Mixes for fine bakery wares products of food categories 07.2.1-07.2.2	5000	348,TH26	2561
08.2.2	Heat-treated processed meat, poultry, and game products in whole pieces or cuts	3000	15,XS96,XS97	2559
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	3000	15,XS96,373, XS97	2559
12.5	Soups and broths	2000	345	2559
12.6	Sauces and like products	5000		2559
14.1.4.2	Non-carbonated water-based flavoured drinks	700	TH30	2561

## SUCROSE OLIGOESTERS, Type I and Type II (ซูโครสโอลิโกเอสเทอร์ แบบชนิด 1 และ แบบชนิด 2)

INS: 473a      Synonym: Type I: Sucrose fatty acid esters (high-esterified); Sucrose oligoesters (high-esterified)  
Type II: Sucrose fatty acid esters; Sucrose oligoesters

Functional Class: Emulsifier, Glazing agent, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.3.2	Beverage whiteners	10000	348,XS250, XS252	2561
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	5000	348	2559
01.4.4	Cream analogues	10000	348	2559
01.7	Dairy-based desserts	3000	348,XS243	2561
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	10000	348,360	2559
02.3	Fat emulsions mainly of type oil-in- water	5000	102,363	2559
02.4	Fat-based desserts	3000	348	2561
03.0	Edible ices	3000	348	2561
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	1500	348,XS314R	2559

## SUCROSE OLIGOESTERS, Type I and Type II (ซูโครสโอลิโกเอสเทอร์ แบบชนิด 1 และ แบบชนิด 2)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.2.9	Fruit-based desserts	2000	348	2561
05.1.2	Cocoa mixes (syrops)	10000	348	2561
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	10000	348	2561
05.1.5	Imitation chocolate, chocolate substitute products	6000	348	2559
05.2	Confectionery including candy, nougats and marzipans	5000	348,XS309R	2561
05.3	Chewing gum	10000	348	2559
05.4	Decorations, toppings and sweet sauces	5000	348,387	2561
06.4.3	Pre-cooked pastas and noodles and like products	2000	194,348	2559
06.5	Cereal and starch based desserts	3000	348	2561
06.6	Batters	10000	348	2559
06.7	Pre-cooked or processed rice products	10000	348	2559
07.2.1	Cakes, cookies and pies	5000	348,TH25	2561
07.2.2	Other fine bakery products	5000	348	2561
07.2.3	Mixes for fine bakery wares products of food categories 07.2.1-07.2.2	5000	348,TH26	2561

**SULFITES (กลุ่มซัลไฟต์)**

INS: 220	Sulfur dioxide (ซัลเฟอร์ไดออกไซด์) Synonym: -	Functional Class: Antioxidant, Bleaching agent, Flour treatment agent, Preservative
INS: 221	Sodium sulfite (โซเดียมซัลไฟต์) Synonym: Disodium sulfite	Functional Class: Antioxidant, Bleaching agent, Flour treatment agent, Preservative
INS: 222	Sodium hydrogen sulfite (โซเดียมไฮโดรเจนซัลไฟต์) Synonym: Sodium bisulfate	Functional Class: Antioxidant, Preservative
INS: 223	Sodium metabisulfite (โซเดียมเมทาไบซัลไฟต์) Synonym: Sodium disulfite; Disodium pentaoxidisulfate; Disodium pyrosulfite	Functional Class: Antioxidant, Bleaching agent, Flour treatment agent, Preservative

INS: 224	Potassium metabisulfite (โพแทสเซียมเมทาไบซัลไฟต์) Synonym: Potassium disulfite; Potassium pentaoxodisulfate; Potassium pyrosulfite	Functional Class: Antioxidant, Bleaching agent, Flour treatment agent, Preservative
INS: 225	Potassium sulfite (โพแทสเซียมซัลไฟต์) Synonym: -	Functional Class: Antioxidant, Preservative
INS: 539	Sodium thiosulfate (โซเดียมไทโอซัลเฟต) Synonym: Sodium hyposulfite	Functional Class: Antioxidant, Sequestrant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.2.1	Frozen fruit	500	44,155	2559
04.1.2.2	Dried fruit	500	44,135,218	2559
04.1.2.3	Fruit in vinegar, oil, or brine	100	44	2559
04.1.2.5	Jams, jellies and marmalades	100	44	2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	100	44	2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	100	44,206	2559
04.1.2.9	Fruit-based desserts	100	44	2559
04.1.2.10	Fermented fruit products	100	44	2559
04.1.2.11	Fruit fillings	100	44	2559
04.2.1.3	Peeled, cut or shredded fresh vegetables, seaweeds, nuts and seeds	50	44,76,136	2559
04.2.2.1	Frozen vegetables, seaweeds, nuts and seeds	50	44,76,136,137	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	500	44,105	2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	100	44	2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	50	44	2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	500	44,138	2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	300	44,205	2559
04.2.2.7	Fermented vegetable and seaweed products	100	44	2559
06.2.1	Flours	200	44	2559

## SULFITES (กลุ่มซัลไฟต์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.2.2	Starches	50	44	2559
06.4.1.2	Treated fresh pastas and noodles and like products	35	44,TH19	2559
06.4.2.2	Treated dried pastas and noodles and like products	45	44	2559
06.4.3	Pre-cooked pastas and noodles and like products	20	44	2559
07.2	Fine bakery wares and mixes	50	44	2559
09.2.1	Frozen fish, fish fillets, and fish products	100	44,139	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	150	44	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	30	44,XS311	2559
09.4	Fully preserved, including canned fish and fish products	150	44,140	2559
11.1.1	White sugar, dextrose anhydrous, dextrose monohydrate and fructose	15	44	2559
11.1.2	Powdered sugar, powdered dextrose	15	44	2559
11.1.3	Soft white sugar, soft brown sugar, glucose syrup, dried glucose syrup and raw cane sugar	20	44,111	2559
11.1.5	Plantation or mill white sugar	70	44	2559
11.2	Brown sugar	40	44	2559
11.3	Sugar solutions and syrups	70	44	2559
11.4	Other sugars and syrups	40	44	2559
12.2.1	Herbs and spices	150	44	2559
12.2.2	Seasonings and condiments	200	44	2559
12.3	Vinegars	100	44	2559
12.4	Mustards	250	44,106	2559
12.6	Sauces and like products	150	44	2559
14.1.2.1	Fruit juice	50	44,122	2559
14.1.2.2	Vegetable juice	50	44,122	2559
14.1.2.3	Concentrates for fruit juice	50	44,122,127	2559
14.1.2.4	Concentrates for vegetable juice	50	44,122,127	2559
14.1.3.1	Fruit nectar	50	44,122	2559
14.1.3.2	Vegetable nectar	50	44,122	2559
14.1.3.3	Concentrates for fruit nectar	50	44,122,127	2559
14.1.3.4	Concentrates for vegetable nectar	50	44,122,127	2559
14.1.4	Water-based flavoured drinks	70	44,127,143	2559

## SULFITES (กลุ่มซัลไฟต์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.1	Beer and malt beverages	50	44	2559
14.2.2	Cider and perry	200	44	2559
14.2.3	Grape wines	350	44,103	2559
14.2.4	Wines other than grape	200	44	2559
14.2.5	Mead	200	44	2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	200	44	2559
14.2.7	Aromatized alcoholic beverages	250	44	2559
15.1	Snacks - potato, cereal, flour or starch based	50	44	2559

## SUNSET YELLOW FCF (ซันเซตเยลโลว์เอฟซีเอฟ)

INS: 110      Synonym: CI Food Yellow 3; Orange  
Yellow 5; CI (1975) No. 15985      Functional Class: Colour

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	70	52	2559
01.6.1	Unripened cheese	300	3	2559
01.6.2.2	Rind of ripened cheese	300		2559
01.6.4	Processed cheese	200	3	2559
01.6.5	Cheese analogues	300	3	2559
01.7	Dairy-based desserts	300		2559
02.1.3	Animal oils and fats	300		2559
02.4	Fat-based desserts	50		2559
03.0	Edible ices	50		2559
04.1.2.5	Jams, jellies and marmalades	300		2559
04.1.2.6	Fruit-based spreads for spread or raw materials	300		2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	200		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	300	182	2559
04.1.2.9	Fruit-based desserts	50		2559
04.1.2.11	Fruit fillings	300		2559
04.2.1.2	Surface-treated fresh vegetables, seaweeds, nuts and seeds	300	4,16	2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	50	92	2559

## SUNSET YELLOW FCF (ซันเซตเยลโลว์เอฟซีเอฟ)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.7	Fermented vegetable and seaweed products	200	92	2559
05.1.4	Cocoa and chocolate products	400	183	2559
05.1.5	Imitation chocolate, chocolate substitute products	300		2559
05.2	Confectionery including candy, nougats and marzipans	300		2559
05.3	Chewing gum	300		2559
05.4	Decorations, toppings and sweet sauces	300		2559
06.3	Breakfast cereals	300		2559
06.4.3	Pre-cooked pastas and noodles and like products	300	153	2559
06.5	Cereal and starch based desserts	50		2559
07.2	Fine bakery wares and mixes	50		2559
08.1	Fresh meat, poultry, and game	300	4,16	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	300	16,XS96,XS97	2559
08.3.1.1	Cured (including salted) non-heat treated processed comminuted meat, poultry, and game products	300	16	2559
08.3.1.2	Cured (including salted) and dried non-heat treated processed comminuted meat, poultry, and game products	135		2559
08.3.1.3	Fermented non-heat treated processed comminuted meat, poultry, and game products	300	16	2559
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	300	16,XS88, XS89,XS98	2559
08.3.3	Frozen processed comminuted meat, poultry, and game products	300	16	2559
08.4	Edible casings	300	16	2559
09.1.1	Fresh fish	300	4,16,50	2559
09.1.2	Fresh molluscs, crustaceans, and echinoderms	300	4,16	2559
09.2.1	Frozen fish, fish fillets, and fish products	300	95	2559
09.2.2	Frozen battered fish, fish fillets and fish products	300	16	2559



## SUNSET YELLOW FCF (ซันเซตเยลโลว์เอฟซีเอฟ)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.3	Frozen minced and creamed fish products	300	16,95	2559
09.2.4.1	Cooked fish and fish products	300	95	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	250		2559
09.2.4.3	Fried fish and fish products	300	16	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	100	22	2559
09.3.1	Fish and fish products marinated in vinegar or wine	300	16	2559
09.3.2	Pickled fish and fish products	300	16	2559
09.3.3	Caviar and other fish roe products	300		2559
09.3.4	Semi-preserved fish and fish products, excluding products of food categories 09.3.1 - 09.3.3	300		2559
09.4	Fully preserved, including canned fish and fish products	300	95	2559
10.1	Fresh eggs	GMP	4	2559
10.4	Egg-based desserts	50		2559
12.2.2	Seasonings and condiments	300		2559
12.4	Mustards	300		2559
12.5	Soups and broths	50		2559
12.6	Sauces and like products	300		2559
13.3	Dietetic foods intended for special medical purposes	50		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	50		2559
13.5	Dietetic foods	300		2559
13.6	Food supplements	300		2559
14.1.4	Water-based flavoured drinks	100	127	2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	200		2559
14.2.7	Aromatized alcoholic beverages	200		2559
15.1	Snacks - potato, cereal, flour or starch based	200		2559

**TALC (ทัลค์)**

INS: 553(iii)    Synonym: Talcum

Functional Class: Anticaking agent, Glazing agent,  
Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	10000		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559

## TALC (ทัลก์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559

## TALC (ทัลก์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## TARA GUM (ทารากัม)

INS: 417      Synonym: Peruvian carob      Functional Class: Gelling agent, Stabilizer,  
Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat- treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP	236	2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559

## TARA GUM (ทาร์ราคัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559

## TARA GUM (ทารากัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.1	Frozen fish, fish fillets, and fish products	GMP	73,XS36, XS92,XS95, XS165,XS190, XS191,XS292, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	73,XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559

## TARA GUM (ทารากัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## TARTRATES (กลุ่มทาร์เทรต)

INS: 334	L(+)-Tartaric acid (กรดแอล(+)-ทาร์ทริก) Synonym: L-Tartaric acid; L-2,3-dihydroxybutanedioic acid; L-2,3-dihydroxysuccinic acid	Functional Class: Acidity regulator, Antioxidant, Flavour enhancer, Sequestrant		
INS: 335(ii)	Sodium L(+)-tartrate (โซเดียมแอล(+)-ทาร์เทรต) Synonym: Sodium dextro-tartrate; Disodium L-tartrate; Disodium (+)-tartrate; Disodium (+)-2,3-dihydroxybutanedioic acid	Functional Class: Acidity regulator, Emulsifying salt, Sequestrant, Stabilizer		
INS: 337	Potassium sodium L(+)-tartrate (โพแทสเซียมโซเดียมแอล(+)-ทาร์เทรต) Synonym: Rochelle salt; Seignette salt; Potassium sodium dextro-tartrate; Potassium sodium L-tartrate; Potassium sodium (+)-tartrate; Potassium sodium (+)-2,3-dihydroxybutanedioic acid	Functional Class: Acidity regulator, Emulsifying salt, Sequestrant, Stabilizer		

## TARTRATES (กลุ่มทาร์เตรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	2000	45,230	2559
01.6.1	Unripened cheese	1500	45,351	2559
01.7	Dairy-based desserts	2000	45,XS243	2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	100	45,361	2559
02.3	Fat emulsions mainly of type oil-in-water	100	45	2559
02.4	Fat-based desserts	100	45	2559
03.0	Edible ices	2000	45	2559
04.1.2.5	Jams, jellies and marmalades	3000	45	2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	20000	45	2561
04.1.2.9	Fruit-based desserts	1000	45	2559
04.1.2.11	Fruit fillings	10000	45	2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	15000	45,XS38, XS115	2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	1300	45,XS13,XS38, XS57,XS145, XS257R,XS259R, XS297	2561
05.1.1	Cocoa mixes (powders), cocoa mass and cocoa cake	5000	45,97,128	2559
05.1.2	Cocoa mixes (syrops)	2000	45	2559
05.1.3	Cocoa-based spreads, for spread, fillings and raw materials	2000	45,XS86	2561
05.1.4	Cocoa and chocolate products	5000	45,128	2559
05.1.5	Imitation chocolate, chocolate substitute products	5000	45	2559
05.2	Confectionery including candy, nougats and marzipans	2000	45,XS309R	2559
05.3	Chewing gum	30000	45	2559
05.4	Decorations, toppings and sweet sauces	8000	45	2559
06.2.1	Flours	5000	45,186	2559
06.2.2	Starches	2000	45	2561
06.4.1	Fresh pastas and noodles and like products	5000	45,128,TH24	2561



## TARTRATES (กลุ่มทาร์เทรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.4.3	Pre-cooked pastas and noodles and like products	7500	45,128,194	2559
06.5	Cereal and starch based desserts	2860	45	2559
07.1	Bread and ordinary bakery wares and mixes	4000	45,388	2561
07.2.1	Cakes, cookies and pies	5000	45	2561
07.2.2	Other fine bakery products	500	45	2561
07.2.3	Mixes for fine bakery wares products of food categories 07.2.1-07.2.2	8000	11,45	2561
08.3.1	Non-heat treated processed comminuted meat, poultry, and game products	500	45	2561
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	500	45,XS88, XS89,XS98	2561
08.3.3	Frozen processed comminuted meat, poultry, and game products	500	45	2561
08.4	Edible casings	2000	45,365	2561
14.1.2.1	Fruit juice	4000	45,128,129	2559
14.1.2.3	Concentrates for fruit juice	4000	45,127,128,129	2559
14.1.3.1	Fruit nectar	4000	45,128	2559
14.1.3.3	Concentrates for fruit nectar	4000	45,127,128	2559

## TARTRAZINE (ตาร์ตราซีน)

INS: 102

Synonym: CI Food Yellow 4, FD&C Yellow No. 5, CI (1975) No. 19140

Functional Class: Colour

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	70	52	2559
01.6.1	Unripened cheese	300	3	2559
01.6.2.2	Rind of ripened cheese	300		2559
01.6.4	Processed cheese	200	3	2559
01.6.5	Cheese analogues	300	3	2559
01.7	Dairy-based desserts	300		2559
02.1.3	Animal oils and fats	300		2559
02.4	Fat-based desserts	50		2559
03.0	Edible ices	50		2559

## TARTRAZINE (ตาร์ตราซีน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.1.2.5	Jams, jellies and marmalades	300		2559
04.1.2.6	Fruit-based spreads for spread or raw materials	300		2559
04.1.2.7	Candied fruits, glazed fruits and crystallized fruits	200		2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	300	182	2559
04.1.2.9	Fruit-based desserts	50		2559
04.1.2.11	Fruit fillings	300		2559
04.2.1.2	Surface-treated fresh vegetables, seaweeds, nuts and seeds	300	4,16	2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	50	92	2559
04.2.2.7	Fermented vegetable and seaweed products	200	92	2559
05.1.4	Cocoa and chocolate products	400	183	2559
05.1.5	Imitation chocolate, chocolate substitute products	300		2559
05.2	Confectionery including candy, nougats and marzipans	300		2559
05.3	Chewing gum	300		2559
05.4	Decorations, toppings and sweet sauces	300		2559
06.3	Breakfast cereals	300		2559
06.4.3	Pre-cooked pastas and noodles and like products	300	153	2559
06.5	Cereal and starch based desserts	50		2559
07.2	Fine bakery wares and mixes	50		2559
08.1	Fresh meat, poultry, and game	300	4,16	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	300	16,XS96,XS97	2559
08.3.1.1	Cured (including salted) non-heat treated processed comminuted meat, poultry, and game products	300	16	2559
08.3.1.2	Cured (including salted) and dried non-heat treated processed comminuted meat, poultry, and game products	135		2559

## TARTRAZINE (ตาร์ทราซีน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.3.1.3	Fermented non-heat treated processed comminuted meat, poultry, and game products	300	16	2559
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	300	16,XS88, XS89,XS98	2559
08.3.3	Frozen processed comminuted meat, poultry, and game products	300	16	2559
08.4	Edible casings	300	16	2559
09.1.1	Fresh fish	300	4,16,50	2559
09.1.2	Fresh molluscs, crustaceans, and echinoderms	300	4,16	2559
09.2.1	Frozen fish, fish fillets, and fish products	300	95	2559
09.2.2	Frozen battered fish, fish fillets and fish products	300	16	2559
09.2.3	Frozen minced and creamed fish products	300	16,95	2559
09.2.4.1	Cooked fish and fish products	300	95	2559
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	250		2559
09.2.4.3	Fried fish and fish products	300	16	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	100	382	2561
09.3.1	Fish and fish products marinated in vinegar or wine	300	16	2559
09.3.2	Pickled fish and fish products	300	16	2559
09.3.3	Caviar and other fish roe products	300		2559
09.3.4	Semi-preserved fish and fish products, excluding products of food categories 09.3.1 - 09.3.3	300		2559
09.4	Fully preserved, including canned fish and fish products	300	95	2559
10.1	Fresh eggs	GMP	4	2559
10.4	Egg-based desserts	50		2559
12.2.2	Seasonings and condiments	300		2559
12.4	Mustards	300		2559
12.5	Soups and broths	50	99	2559
12.6	Sauces and like products	300		2559

## TARTRAZINE (ตาร์ทราซีน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.3	Dietetic foods intended for special medical purposes	50		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	50		2559
13.5	Dietetic foods	300		2559
13.6	Food supplements	300		2559
14.1.4	Water-based flavoured drinks	100	127	2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	200		2559
14.2.7	Aromatized alcoholic beverages	200		2559
15.1	Snacks - potato, cereal, flour or starch based	200		2559

## TERTIARY BUTYLHYDROQUINONE (เทอร์เชียรีบิวทิลไฮโดรควิโนน)

INS: 319      Synonym: TBHQ; Mono-tert-butylhydroquinone, t-Butylhydroquinone      Functional Class: Antioxidant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.3.2	Beverage whiteners	100	15,195	2559
02.1.2	Vegetable oils and fats	200	15,130	2559
02.1.3	Animal oils and fats	200	15,130	2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	200	15,130	2559
02.3	Fat emulsions mainly of type oil-in-water	200	15,130	2559
02.4	Fat-based desserts	200	15,130	2559
03.0	Edible ices	200	15,195	2559
05.1.4	Cocoa and chocolate products	200	15,130,303	2561
05.2	Confectionery including candy, nougats and marzipans	200	15,130,XS309R	2561
05.3	Chewing gum	400	130	2559
05.4	Decorations, toppings and sweet sauces	200	15,130	2559
06.4.3	Pre-cooked pastas and noodles and like products	200	15,130	2559
07.1.1	Breads and rolls	200	15,195	2559
07.1.2	Crackers, excluding sweet crackers	200	15,195	2559

## TERTIARY BUTYLHYDROQUINONE (เทอร์เชียรีบิวทิลไฮโดรควิโนน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
07.1.3	Other ordinary bakery products	200	15,130	2559
07.1.4	Bread-type products	200	15,195	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	100	15,130,167, XS96,XS97	2559
08.3	Processed comminuted meat, poultry, and game products	100	15,130,162, XS88,XS89,XS98	2559
12.2	Herbs, spices, seasonings, and condiments	200	15,130	2559
12.4	Mustards	200	15	2559
12.5	Soups and broths	200	15,130	2559
12.6	Sauces and like products	200	15,130	2559
15.0	Ready-to-eat savouries	200	15,130	2559

## THAUMATIN (ทอมาทิน)

INS: 957

Synonym: -

Functional Class: Flavour enhancer,  
Sweetener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559

## THAUMATIN (ทอมาทีน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559

## THAUMATIN (ทอมาทีน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**THERMALLY OXIDIZED SOYA BEAN OIL INTERACTED WITH MONO- AND DIGLYCERIDES OF FATTY ACIDS**  
**(น้ำมันถั่วเหลืองซึ่งถูกออกซิไดซ์ที่อุณหภูมิสูง แล้วทำปฏิกิริยากับกลุ่มมอโนและไดกลีเซอไรด์ของกรดไขมัน)**

INS: 479

Synonym: TOSOM

Functional Class: Emulsifier

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	5000		2559

**THIODIPROPIONATES (กลุ่มไทโอดิโพรพิโอเนต)**

INS: 388 Thiodipropionic acid Functional Class: Antioxidant  
(กรดไทโอดิโพรพิโอนิก)  
Synonym: 3,3'-Thiodipropionic acid;  
Diethyl sulfide 2,2'-dicarboxylic  
acid; Thiodihydracrylic acid

INS: 389 Dilauryl thiodipropionate Functional Class: Antioxidant  
(ไดลอริลไทโอดิโพรพิโอเนต)  
Synonym: Didodecyl 3,3'-thiodipropionic  
acid

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.1.2	Vegetable oils and fats	200	46	2559
02.1.3	Animal oils and fats	200	46	2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	200	46	2559
09.2.2	Frozen battered fish, fish fillets and fish products	200	15,46,XS166	2561
14.1.4	Water-based flavoured drinks	1000	15,46,127	2559
15.0	Ready-to-eat savouries	200	46	2559

**TITANIUM DIOXIDE (ไทเทเนียมไดออกไซด์)**

INS: 171 Synonym: Titania; CI Pigment white 6;  
CI (1975) No. 77891 Functional Class: Colour

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559



## TITANIUM DIOXIDE (ไทเทเนียมไดออกไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559

## TITANIUM DIOXIDE (ไทเทเนียมไดออกไซด์)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## TOCOPHEROLS (กลุ่มโทคอเฟอรอล)

INS: 307a	d-alpha-Tocopherol (ดี-แอลฟา-โทคอเฟอรอล) Synonym: Vitamin E; RRR-alpha - tocopherol, 5,7,8-trimethyltolcol, (+)-alphaTocophero	Functional Class: Antioxidant
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INS: 307b	Tocopherol concentrate, mixed (โทคอเฟอรอลผสมชนิดเข้มข้น) Synonym: Vitamin E	Functional Class: Antioxidant		
INS: 307c	dl-alpha-Tocopherol (ดีแอล-แอลฟา-โทคอเฟอรอล) Synonym: Vitamin E; dl-5,7,8- Trimethyltocol	Functional Class: Antioxidant		
FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.6.5	Cheese analogues	400		2559
01.7	Dairy-based desserts	500	XS243	2559
01.8	Whey and whey products, excluding whey cheeses	200		2559
02.1.1	Butter oil, anhydrous milkfat, ghee	500	171	2559
02.1.2	Vegetable oils and fats	300	356,357	2559
02.1.3	Animal oils and fats	300	358	2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	500		2559
02.3	Fat emulsions mainly of type oil-in- water	900		2559
02.4	Fat-based desserts	200		2559
03.0	Edible ices	500	15	2559
04.1.2.8	Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk	150	XS240,XS314R	2559
04.1.2.9	Fruit-based desserts	500	15	2559
04.1.2.11	Fruit fillings	150		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	200	XS38	2559
05.1.2	Cocoa mixes (syrops)	500	15	2559
05.1.4	Cocoa and chocolate products	750	15,168	2559
05.1.5	Imitation chocolate, chocolate substitute products	500	15	2559
05.2	Confectionery including candy, nougats and marzipans	500	15,XS309R	2559
05.3	Chewing gum	1500		2559
05.4	Decorations, toppings and sweet sauces	500	15	2559
06.2.1	Flours	5000	15,186	2559
06.3	Breakfast cereals	200		2559

## TOCOPHEROLS (กลุ่มโทคอเฟอรอล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
06.4.2	Dried pastas and noodles and like products	500	15,211	2559
06.4.3	Pre-cooked pastas and noodles and like products	200	211	2559
06.5	Cereal and starch based desserts	500	15	2559
06.6	Batters	100		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	300	XS96,XS97	2559
08.3	Processed comminuted meat, poultry, and game products	300	XS88,XS89,XS98	2559
08.4	Edible casings	5000	365	2559
12.5	Soups and broths	50	346	2559
16.0	Prepared foods	200		2561

## TRAGACANTH GUM (ทรากาแคนท์กัม)

INS: 413      Synonym: -      Functional Class: Emulsifier, Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP	236	2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559

## TRAGACANTH GUM (ทรากาแคนท์กัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559

## TRAGACANTH GUM (ทรากาแคนท์กัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.4	Edible casings	GMP		2559
09.2.1	Frozen fish, fish fillets, and fish products	GMP	XS36,XS92, XS95,XS165, XS190,XS191, XS292,XS312, XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	16,XS166	2561
09.2.3	Frozen minced and creamed fish products	GMP	16	2559
09.2.4.1	Cooked fish and fish products	GMP	241	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559

## TRAGACANTH GUM (ทรากาแคนท์กัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## TREHALOSE (ทรีฮาโลส)

INS: -      Synonym: alpha,alpha-trehalose      Functional Class: Texturizing agent, Stabilizer, Humectant, Sweetener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.7	Dairy-based desserts	GMP	TH13	2559
02.4	Fat-based desserts	GMP	TH13	2559
03.0	Edible ices	GMP	TH13	2559
04.1.2.9	Fruit-based desserts	GMP		2559
05.1.4	Cocoa and chocolate products	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP	TH22	2559
07.1.1.1	Yeast-leavened breads and specialty breads	GMP		2559
07.1.6	Mixes for bread and ordinary bakery wares products of food categories 07.1.1-07.1.5	GMP		2559
07.2.1	Cakes, cookies and pies	GMP		2559

## TREHALOSE (ทรีฮาโลส)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
07.2.2	Other fine bakery products	GMP		2559
07.2.3	Mixes for fine bakery wares products of food categories 07.2.1-07.2.2	GMP		2559
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	GMP		2559
08.3.3	Frozen processed comminuted meat, poultry, and game products	GMP		
09.2.1	Frozen fish, fish fillets, and fish products	GMP		2559
09.2.2	Frozen battered fish, fish fillets and fish products	GMP		2559
09.2.4.1	Cooked fish and fish products	GMP	TH17	2559
12.2.2	Seasonings and condiments	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
15.1	Snacks - potato, cereal, flour or starch based	GMP		2559
15.3	Snacks - fish based	GMP		2559

## TRIACETIN (ไตรแอซีทีน)

INS: 1518    Synonym: Glyceryl triacetate    Functional Class: Carrier, Emulsifier, Humectant

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559



## TRIACETIN (ไตรแอซีทีน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559

## TRIACETIN (ไตรแอซีทีน)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## TRIAMMONIUM CITRATE (ไตรแอมโมเนียมซิเตรต)

INS: 380

Synonym: Citric acid triammonium salt; Ammonium citrate tribasic

Functional Class: Acidity regulator

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559

## TRIAMMONIUM CITRATE (ไตรแอมโมเนียมซิเตรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559

## TRIAMMONIUM CITRATE (ไตรแอมโมเนียมซิเตรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559

## TRIAMMONIUM CITRATE (ไตรแอมโมเนียมซิเตรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## TRICALCIUM CITRATE (ไตรแคลเซียมซิเตรต)

INS: 333(iii) Synonym: Calcium citrate

Functional Class: Acidity regulator, Emulsifying salt, Firming agent, Sequestrant, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.1	Frozen vegetables, seaweeds, nuts and seeds	GMP	29	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559

## TRICALCIUM CITRATE (ไตรแคลเซียมซิเตรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2	Processed fish and fish products	GMP	XS36,XS92, XS95,XS165, XS166,XS190, XS191,XS292, XS312,XS315	2561
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559

## TRICALCIUM CITRATE (ไตรแคลเซียมซิเตรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	GMP	239	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## TRIETHYL CITRATE (ไตรเอทิลซิเตรต)

INS: 1505      Synonym: Ethyl citrate

Functional Class: Carrier, Emulsifier, Sequestrant,  
Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
10.2.1	Liquid egg products	2500	47	2559
10.2.3	Dried and/or heat coagulated egg products	2500	47	2559
14.1.4	Water-based flavoured drinks	200	127	2559

**TRIPOTASSIUM CITRATE (ไตรโพแทสเซียมซิเตรต)**

INS: 332(ii)    Synonym: Potassium citrate

Functional Class: Acidity regulator, Emulsifying salt, Sequestrant, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.3	Fluid Buttermilk (plain)	GMP	261	2559
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.1	Frozen vegetables, seaweeds, nuts and seeds	GMP	29	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559



## TRIPOTASSIUM CITRATE (ไตรโพแทสเซียมซิเตรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2	Processed fish and fish products	GMP	253,391,XS36, XS92,XS95, XS190,XS191, XS292,XS312, XS315	2561
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559

## TRIPOTASSIUM CITRATE (ไตรโพแทสเซียมซิเตรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	GMP	55,72	2559
13.1.2	Follow-up formulae	GMP	72	2559
13.1.3	Formulae for special medical purposes for infants	GMP	55,72	2559
13.2	Complementary foods for infants and young children	GMP	239	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**TRISODIUM CITRATE (ไตรโซเดียมซิเตรต)**

INS: 331(iii)    Synonym: Sodium citrate

Functional Class: Acidity regulator, Emulsifier,  
Emulsifying salt, Sequestrant, Stabilizer

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.3	Fluid Buttermilk (plain)	GMP	261	2559
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
01.8.2	Dried whey and whey products	GMP		2559
02.1.1	Butter oil, anhydrous milkfat, ghee	GMP	171	2559
02.1.2	Vegetable oils and fats	GMP	277	2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.1.1	Untreated fresh vegetables, seaweeds, nuts and seeds	GMP	262	2559
04.2.2.1	Frozen vegetables, seaweeds, nuts and seeds	GMP	29	2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559

## TRISODIUM CITRATE (ไตรโซเดียมซิเตรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulp and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.2.1	Flours	GMP	25	2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.2	Processed fish and fish products	GMP	253,391,XS36, XS92,XS95, XS190,XS191, XS292,XS312, XS315	2561
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559

## TRISODIUM CITRATE (ไตรโซเดียมซิเตรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.1.1	Infant formulae	GMP	55,72	2559
13.1.2	Follow-up formulae	GMP	72,316	2559
13.1.3	Formulae for special medical purposes for infants	GMP	55,72	2559
13.2	Complementary foods for infants and young children	5000	238,240,319,320	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559

## TRISODIUM CITRATE (ไตรโซเดียมซิเตรต)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## XANTHAN GUM (แซนแทนกัม)

INS: 415      Synonym: -      Functional Class: Emulsifier, Foaming agent,  
Stabilizer, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.2.1.1	Fermented milks (plain), not heat- treated after fermentation	GMP	234,235	2559
01.2.1.2	Fermented milks (plain), heat-treated after fermentation	GMP	234	2559
01.2.2	Renneted milk (plain)	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.1	Pasteurized cream (plain)	GMP	236	2559
01.4.2	Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559
02.3	Fat emulsions mainly of type oil-in- water	GMP		2559
02.4	Fat-based desserts	GMP		2559

## XANTHAN GUM (แซนแทนกัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.7	Fermented vegetable and seaweed products	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.1	Fresh pastas and noodles and like products	GMP	211	2559
06.4.2	Dried pastas and noodles and like products	GMP	256	2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	GMP	16,326	2559
08.1.2	Fresh meat, poultry and game, comminuted	GMP	281	2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559

## XANTHAN GUM (แซนแทนกัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
09.2.1	Frozen fish, fish fillets, and fish products	GMP	391,XS36,XS92, XS95,XS190, XS191,XS292, XS312,XS315	2561
09.2.2	Frozen battered fish, fish fillets and fish products	GMP	177	2559
09.2.3	Frozen minced and creamed fish products	GMP		2559
09.2.4.1	Cooked fish and fish products	GMP	241,327	2559
09.2.4.3	Fried fish and fish products	GMP	41	2559
09.2.5	Smoked, dried, fermented, cured and/or salted fish and fish products	GMP	300	2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.1	Liquid egg products	GMP		2559
10.2.2	Frozen egg products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559
11.4	Other sugars and syrups	GMP	258	2559
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.1.2	Salt substitutes	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.2	Complementary foods for infants and young children	10000	239,273	2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559



## XANTHAN GUM (แซนแทนกัม)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	GMP	160	2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

## XYLITOL (ไซลิตอล)

INS: 967      Synonym: -      Functional Class: Emulsifier, Humectant, Stabilizer, Sweetener, Thickener

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
01.1.4	Flavoured Fluid Milk Drinks	GMP		2559
01.3	Condensed milk (plain) and analogues	GMP		2559
01.4.3	Clotted cream (plain)	GMP		2559
01.4.4	Cream analogues	GMP		2559
01.5	Milk powder and cream powder (plain) and powder analogues	GMP		2559
01.6.1	Unripened cheese	GMP		2559
01.6.2	Ripened cheese	GMP		2559
01.6.4	Processed cheese	GMP		2559
01.6.5	Cheese analogues	GMP		2559
01.7	Dairy-based desserts	GMP		2559
01.8.1	Liquid whey and whey products	GMP		2559
02.2.2	Fat spreads, dairy fat spreads and blended spreads for spread or raw materials	GMP		2559

## XYLITOL (ไซลิทอล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
02.3	Fat emulsions mainly of type oil-in-water	GMP		2559
02.4	Fat-based desserts	GMP		2559
03.0	Edible ices	GMP		2559
04.1.2	Processed fruit	GMP		2559
04.2.2.2	Dried vegetables, seaweeds, nuts and seeds	GMP		2559
04.2.2.3	Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce	GMP		2559
04.2.2.4	Canned or bottled or retort pouch vegetables and seaweeds	GMP		2559
04.2.2.5	Vegetable, seaweed, nut and seed purees and spreads	GMP		2559
04.2.2.6	Vegetable, seaweed, nut and seed pulps and preparations	GMP		2559
04.2.2.8	Cooked or fried vegetables and seaweeds	GMP		2559
05.0	Confectionery	GMP		2559
06.3	Breakfast cereals	GMP		2559
06.4.3	Pre-cooked pastas and noodles and like products	GMP		2559
06.5	Cereal and starch based desserts	GMP		2559
06.6	Batters	GMP		2559
06.7	Pre-cooked or processed rice products	GMP		2559
06.8	Soybean products	GMP		2559
07.0	Bakery wares	GMP		2559
08.2	Processed meat, poultry, and game products in whole pieces or cuts	GMP		2559
08.3	Processed comminuted meat, poultry, and game products	GMP		2559
08.4	Edible casings	GMP		2559
09.3	Semi-preserved fish and fish products	GMP		2559
09.4	Fully preserved, including canned fish and fish products	GMP		2559
10.2.3	Dried and/or heat coagulated egg products	GMP		2559
10.3	Preserved eggs	GMP		2559
10.4	Egg-based desserts	GMP		2559

## XYLITOL (ไซลิทอล)

FoodCatNo	Food Category	Maximum use Levels (mg/kg)	Notes	Year Adopted
11.6	Table-top sweeteners directly sold to consumers	GMP		2559
12.2.1	Herbs and spices (SPICES ONLY)	GMP		2559
12.2.2	Seasonings and condiments	GMP		2559
12.3	Vinegars	GMP		2559
12.4	Mustards	GMP		2559
12.5	Soups and broths	GMP		2559
12.6	Sauces and like products	GMP		2559
12.7	Salads and sandwich spreads	GMP		2559
12.8	Yeast and like products	GMP		2559
12.9	Soybean-based seasonings and condiments	GMP		2559
12.10	Protein products other than from soybeans	GMP		2559
13.3	Dietetic foods intended for special medical purposes	GMP		2559
13.4	Dietetic formulae for slimming purposes and weight reduction	GMP		2559
13.5	Dietetic foods	GMP		2559
13.6	Food supplements	GMP		2559
14.1.4	Water-based flavoured drinks	GMP		2559
14.2.1	Beer and malt beverages	GMP		2559
14.2.2	Cider and perry	GMP		2559
14.2.4	Wines other than grape	GMP		2559
14.2.5	Mead	GMP		2559
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	GMP		2559
14.2.7	Aromatized alcoholic beverages	GMP		2559
15.0	Ready-to-eat savouries	GMP		2559
16.0	Prepared foods	GMP		2559

**Note:**

“FoodCatNo” is intended as a harmonised naming system for food category as an alternative to the use of the food category name.

“Food Category” is hierarchical and applies to all foodstuffs. The system includes 16 main categories and a description of the foods covered by each food category according to the table of the annex II; part 1 of this Notification.

“Functional Class” is group of technological purposes of food additive.

“INS” is intended as a harmonised naming system for food additives as an alternative to the use of the specific name.

“Maximum use Levels” is the highest concentration of the additive determined to be functionally effective in a food or food category. It is expressed as mg additive/kg of food (ppm).

“GMP” is the quantity of the additive added to food shall be limited to the lowest possible level necessary to accomplish its desired effect under conditions of good manufacturing practice (GMP)

“Notes” is special conditions applying to the use of food additives according to the table of the annex II; part 2 of this Notification.

“Year Adopted” is year of provision has been adopted.

Unofficial Translation

## Annex II

### Attachment to the Notification of the Ministry of Public Health (No. 389) B.E 2561 (2018) Re: Food Additives (No.5)

#### Part 1: Food Category System

<b>01.0</b>	<b>Dairy products and analogues</b>
	Includes all types of plain and flavoured dairy products that are derived from the milk of any milking animal (e.g. cow, sheep, goat, and buffalo). <u>Note:</u> a “plain” product is one that is not flavoured, nor contains fruit, vegetables or other non-dairy ingredients, nor is mixed with other non-dairy ingredients, unless permitted by relevant standards. Analogues are products in which milk fat has been partially or wholly replaced by vegetable fats or oils.
<b>01.1</b>	<b>Fluid milk and milk products</b>
	Includes all plain and flavoured fluid milks based on skim, part-skim, low-fat and whole milk. Excluding plain fermented products and plain renneted milk products of food category 01.2
<b>01.1.1</b>	<b>Fluid milk (plain)</b>
	Plain fluid milk obtained from milking animals (e.g., cows, sheep, goats, and buffalo) that has been processed. Includes pasteurized, ultra-high temperature (UHT) treated, sterilized <sup>13</sup> , homogenized, or fat adjusted milk. Includes, but is not limited to, skim, part-skim, low-fat and whole milk.
<b>01.1.2</b>	<b>Other fluid milks (plain)</b>
	Includes all plain fluid milk, but is not limited to, plain recombined fluid milks, plain reconstituted fluid milks, plain composite milks, non-flavoured vitamin and mineral fortified fluid milks, protein adjusted milks, lactose reduced milk, and plain milk-based beverages. In this food category, plain products contain no added flavouring nor other ingredients that intentionally impart flavour, but may contain other non-dairy ingredients. Excluding products of food categories 01.1.1 Fluid milk (plain), 01.1.3 Fluid buttermilk (plain), and 01.2 Fermented and renneted milk products (plain).
<b>01.1.3</b>	<b>Fluid Buttermilk (plain)</b>
	Fluid buttermilk is the nearly milkfat-free fluid remaining from the butter-making process. Fluid buttermilk is also produced by fermentation of fluid skim milk, either by spontaneous souring by the action of lactic acid-forming or aroma-forming bacteria, or by inoculation of heated milk with pure bacterial cultures (cultured buttermilk). Fluid buttermilk may be pasteurized or sterilized.
<b>01.1.4</b>	<b>Flavoured Fluid Milk Drinks</b>
	Includes all mixes and ready-to-drink fermented or not fermented milk-based drinks with flavourings and/or food ingredients that intentionally impart flavour, including whey-based drinks, and lassi (liquid obtained by whipping curd from the lactic acid fermentation of milk, and mixing with sugar or intense sweetener) and similar products. Excluding mixes for cocoa (cocoa-sugar mixtures) in category 05.1.1.

<b>01.2</b>	<b>Fermented and renneted milk products (plain)</b>
	Includes all plain fermented or renneted products based on skim, part-skim, low-fat and whole milk. Excluding flavoured products are included in category 01.1.4 (beverages) and 01.7 (desserts).
<b>01.2.1</b>	<b>Fermented milks (plain)</b>
	Includes all plain products, including fluid fermented milk, acidified milk and cultured milk. Plain yoghurt and plain drinks based on fermented milk, which do not contain flavouring or colours, may be found in sub-categories depending on whether it is heat-treated after fermentation or not.
<b>01.2.1.1</b>	<b>Fermented milks (plain), not heat-treated after fermentation</b>
	Includes fluid and non-fluid plain products, which do not heat-treated after fermentation.
<b>01.2.1.2</b>	<b>Fermented milks (plain), heat-treated after fermentation</b>
	Includes fluid and non-fluid plain products, which have been heat-treated (e.g. sterilized or pasteurized), after fermentation.
<b>01.2.2</b>	<b>Renneted milk (plain)</b>
	Plain, coagulated milk produced by the action of milk coagulating enzymes.
<b>01.3</b>	<b>Condensed milk (plain) and analogues</b>
	Includes plain and sweetened types of condensed milk, evaporated milk, and their analogues (including beverage whiteners). Includes products based on skim, part-skim, low-fat and whole milk, blends of evaporated skimmed milk and vegetable fat, and blends of sweetened condensed skimmed milk and vegetable fat.
<b>01.3.1</b>	<b>Condensed milk (plain)</b>
	Condensed milk is obtained by partial removal of water from milk may be accomplished by heating and sugar may have been added. Excluding flavoured condensed milk specified under category 01.3.2
<b>01.3.2</b>	<b>Beverage whiteners</b>
	Milk or cream substitute consisting of a vegetable fat-water emulsion in water with milk protein and lactose or vegetable proteins for use in beverages such as coffee and tea. Also includes the same type of products in powdered form.
<b>01.4</b>	<b>Cream (plain) and the like</b>
	Cream is a fluid dairy product, relatively high in fat content in comparison to milk. Includes all plain fluid, semi-fluid and semi-solid cream and cream analogue products. Excluding flavoured cream products are found in category 01.1.4 (beverages) and 01.7 (desserts).
<b>01.4.1</b>	<b>Pasteurized cream (plain)</b>
	Cream subjected to pasteurization by appropriate heat treatment or made from pasteurized milk. Includes milk cream and “half-and-half.”

<b>01.4.2</b>	<b>Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)</b>
	Includes every cream, regardless of fat content, which has undergone a higher heat-treatment than pasteurization e.g. sterilized cream, ultra-heat treated (UHT) cream or ultrapasteurized cream. Also includes whipping cream, whipped cream and cream may also be packaged under pressure (whipped cream). Excluding Creams or toppings with partial or total replacement of milkfat by other fats are included in sub-category 01.4.4 (cream analogues).
<b>01.4.3</b>	<b>Clotted cream (plain)</b>
	Thickened, viscous cream formed from the action of milk coagulating enzymes. Includes sour cream (cream subjected to lactic acid fermentation achieved as described for buttermilk (01.1.3)).
<b>01.4.4</b>	<b>Cream analogues</b>
	Cream substitute consisting of a vegetable fat-water emulsion in liquid or powdered form for use other than as a beverage whitener. Includes instant whipped cream toppings and sour cream substitutes. Excluding beverage whitener specified under category 01.3.2
<b>01.5</b>	<b>Milk powder and cream powder (plain) and powder analogues</b>
	Includes plain milk powders, cream powders, or combination of the two, and their analogues. Includes products based on skim, part-skim, low-fat and whole milk.
<b>01.5.1</b>	<b>Milk powder and cream powder (plain)</b>
	Milk products obtained by partial removal of water from milk or cream and produced in a powdered form, but are not limited to, non-flavoured vitamin and mineral fortified milk powder, protein adjusted milk powder, and lactose reduced milk powder. Includes casein and caseinates. In this food category, plain products contain no added flavouring nor other ingredients that intentionally impart flavour, but may contain other non-dairy ingredients.
<b>01.5.2</b>	<b>Milk and cream powder analogues</b>
	Products based on a fat-water emulsion and dried for use other than as a beverage whitener. Excluding beverage whitener specified under category 01.3.2
<b>01.6</b>	<b>Cheese and analogues</b>
	Cheese and cheese analogues are products that have water and fat included within a coagulated milk protein structure. Excluding cheese sauce (12.6.2), cheese-flavoured snacks (15.1), and composite prepared foods containing cheese as an ingredient (e.g. macaroni and cheese) (16.0) are categorized elsewhere.
<b>01.6.1</b>	<b>Unripened cheese</b>
	Unripened cheese, including fresh cheese, is ready for consumption soon after manufacture. Includes the whole unripened cheese and unripened cheese rind. Most products are plain, however, some, such as cottage cheese and cream cheese, may be flavoured or contain ingredients such as fruit, vegetables or meat.

<b>01.6.2</b>	<b>Ripened cheese</b>
	Ripened cheese is not ready for consumption soon after manufacture, but is held under such time and temperature conditions so as to allow the necessary biochemical and physical changes that characterize the specific cheese. For mould-ripened cheese, the ripening is accomplished primarily by the development of characteristic mould growth throughout the interior and/or on the surface of the cheese. Ripened cheese may be soft, firm, hard, or extra-hard. Includes cheese in brine, which is a ripened semi-hard to soft cheese, white to yellowish in colour with a compact texture, and without actual rind that has been preserved in brine until presented to the consumer.
<b>01.6.2.1</b>	<b>Ripened cheese, includes rind</b>
	Refers to ripened (including mould-ripened) cheese, including rind, or any part thereof, such as cut, shredded, grated or sliced cheese.
<b>01.6.2.2</b>	<b>Rind of ripened cheese</b>
	Refers to the rind only of the cheese. The rind of the cheese is the exterior portion of the cheese mass that initially has the same composition as the interior portion of the cheese, but which may dry after brining and ripening.
<b>01.6.2.3</b>	<b>Cheese powder</b>
	Dehydrated product prepared from a variety or processed cheese. Product is intended either to be reconstituted with milk or water to prepare a sauce, or used as-is as an ingredient (e.g. with cooked macaroni, milk and butter to prepare a macaroni and cheese casserole). Includes spray-dried cheese. Excluding grated or shredded variety cheese (01.6.2.1); grated or shredded processed cheese (01.6.4).
<b>01.6.3</b>	<b>Whey cheese</b>
	A solid or semi-solid product obtained by concentration of whey with or without the addition of milk, cream or other materials of milk origin, and moulding of the concentrated product. Includes the whole cheese and the rind of the cheese. Excluding whey protein cheese (01.6.6)
<b>01.6.4</b>	<b>Processed cheese</b>
	Product with a very long shelf life obtained by melting and emulsifying cheese. Includes products manufactured by heating and emulsifying mixtures of cheese, milkfat, milk protein, milk powder, and water in different amounts. Products may contain other added ingredients, such as aromas, seasonings and fruit, vegetables and/or meat. Product may be spreadable or cut into slices and pieces. The term "processed" does not mean cutting, grating, shredding, etc. of cheese. Cheese treated by these mechanical processes are included under food category 01.6.2 (Ripened cheese).



<b>01.6.4.1</b>	<b>Plain processed cheese</b>
	Processed cheese product that does not contain added flavours, seasonings, fruit, vegetables and/or meat.
<b>01.6.4.2</b>	<b>Flavoured processed cheese</b>
	Processed cheese product that contains added flavours, seasonings, fruit, vegetables and/or meat.
<b>01.6.5</b>	<b>Cheese analogues</b>
	Products that look like cheese, but in which milkfat has been partly or completely replaced by other fats. Includes imitation cheese, imitation cheese mixes, and imitation cheese powders.
<b>01.6.6</b>	<b>Whey protein cheese</b>
	Product containing the protein extracted from the whey component of milk. These products are principally made by coagulation of whey proteins. Excluding whey cheese (01.6.3).
<b>01.7</b>	<b>Dairy-based desserts</b>
	Includes ready-to-eat flavoured dairy dessert products and dessert mixes. Includes frozen dairy confections and novelties, and dairy-based fillings. Includes flavoured yoghurt (a milk product obtained by fermentation of milk and milk products to which flavours and ingredients (e.g. fruit, cocoa, coffee) have been added) that may or may not be heat-treated after fermentation. Excluding edible ices (including sherbet and sorbet) are water-based and contain no dairy ingredients (03.0).
<b>01.8</b>	<b>Whey and whey products, excluding whey cheeses</b>
	Includes a variety of whey-based products in liquid and powdered forms. Excluding whey cheese (01.6.3)
<b>01.8.1</b>	<b>Liquid whey and whey products</b>
	Whey is the fluid separated from the curd after coagulation of milk, cream, skimmed milk or buttermilk with milk coagulating enzymes during the manufacture of cheese, casein or similar products. Acid whey is obtained after the coagulation of milk, cream, skimmed milk or buttermilk, mainly with acids of the type used for the manufacture of fresh cheese. Excluding whey cheese (01.6.3)
<b>01.8.2</b>	<b>Dried whey and whey products</b>
	Whey powders are prepared by spray- or roller-drying whey or acid whey from which the major portion of the milkfat has been removed. Excluding whey cheese (01.6.3)
<b>02.0</b>	<b>Fats and oils, and fat emulsions</b>
	Includes all fat-based products that are derived from vegetable, animal or marine sources, or their mixtures.

<b>02.1</b>	<b>Fats and oils essentially free from water</b>
	Edible fats and oils are foods composed mainly of triglycerides of fatty acids from vegetable, animal or marine sources.
<b>02.1.1</b>	<b>Butter oil, anhydrous milkfat, ghee</b>
	The milkfat products anhydrous milkfat, anhydrous butter oil and butter oil are products derived exclusively from milk and/or products obtained from milk by a process that almost completely removes water and non-fat solids. Ghee is a product obtained exclusively from milk, cream or butter by a process that almost completely removes water and non-fat solids; it has a specially developed flavour and physical structure.
<b>02.1.2</b>	<b>Vegetable oils and fats</b>
	Edible fats and oils obtained from edible plant sources. Products may be from a single plant source or marketed and used as blended oils that are generally designated as edible, cooking, frying, table or salad oils. Virgin oils are obtained by mechanical means (e.g. pressing or expelling), with application of heat only so as not to alter the natural composition of the oil. Virgin oils are suitable for consumption in the natural state. Cold pressed oils are obtained by mechanical means without application of heat.
<b>02.1.3</b>	<b>Animal oils and fats</b>
	All animal fats and oils should be derived from animals in good health at the time of slaughter and intended for human consumption. Lard is fat rendered from the fatty tissue of swine. Edible beef fat is obtained from fresh bovine fatty tissue covering the abdominal cavity and surrounding the kidney and heart, and from other compact, undamaged fat tissues. Such fresh fat obtained at the time of slaughter is the "killing fat." Prime beef fat (premiere jus or oleo stock) is obtained by low-heat rendering (50-55°C) of killing fat and selected fat trimmings (cutting fat). Secunda beef fat is a product with typical beef fat odour and taste obtained by rendering (60-65°C) and purifying beef fat. Rendered pork fat is fat obtained from the tissue and bones of swine. Edible tallow (dripping) is produced by the rendering of fatty tissue (excluding trimmings and cutting fat), attached muscles and bones of bovine animals or sheep. Fish oils are derived from suitable sources such as herring, sardines, sprat, and anchovies.
<b>02.2</b>	<b>Fat emulsions mainly of type water-in-oil</b>
	Include all emulsified products excluding fat-based counterparts of dairy products and dairy desserts.
<b>02.2.1</b>	<b>Butter</b>
	Butter is a fatty product consisting of a primarily water-in-oil emulsion derived exclusively from milk and/or products obtained from milk.

<b>02.2.2</b>	<b>Fat spreads, dairy fat spreads and blended spreads for spread or raw materials</b>
	Includes fat spreads (emulsions principally of the type water and edible fats and oils), dairy fat spreads (emulsions principally of the type water-in-milkfat), and blended spreads (fat spreads blended with higher amounts of milkfat). Also includes reduced fat-based products derived from milkfat or from animal or vegetable fats, including reduced-fat counterparts of butter, margarine, and their mixtures.
<b>02.3</b>	<b>Fat emulsions mainly of type oil-in-water</b>
	Includes fat-based counterparts of dairy-based foods excluding dessert products. The fat portion of these products are derived from sources other than milkfat (e.g. vegetable fats and oils). Excluding mayonnaise is included in food category 12.6.1.
<b>02.4</b>	<b>Fat-based desserts</b>
	Includes fat-based counterparts of dairy-based desserts, which are found in category 01.7. Includes ready-to-eat products and their mixes. Also includes non-dairy fillings for desserts.
<b>03.0</b>	<b>Edible ices</b>
	This category includes water-based frozen desserts, confections and novelties. Products may be contain other ingredients e.g. fruits, sugar. Products that not contain fat or contain fat less than 5% by weight. Excluding Frozen desserts containing primarily dairy ingredients are included in food category 01.7.
<b>04.0</b>	<b>Fruits, vegetables, seaweeds, nuts and seeds</b>
	This major category is divided into two categories: 04.1 (Fruit) and 04.2 (Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds). Includes fresh and processed products.
<b>04.1</b>	<b>Fruits</b>
	Includes all fresh (04.1.1) and processed (04.1.2) products.
<b>04.1.1</b>	<b>Fresh fruit</b>
	Fresh fruit is generally free of additives. However, fresh fruit that is coated or cut or peeled for presentation to the consumer may contain additives.
<b>04.1.1.1</b>	<b>Untreated fresh fruit</b>
	Raw fruit presented fresh from harvest.
<b>04.1.1.2</b>	<b>Surface-treated fresh fruit</b>
	The surfaces of certain fresh fruit are coated with glazes or waxes or are treated with other food additives that act as protective coatings and/or help to preserve the freshness and quality of the fruit.
<b>04.1.1.3</b>	<b>Peeled or cut fresh fruit</b>
	Fresh fruit that is cut or peeled and presented to the consumer.

<b>04.1.2</b>	<b>Processed fruit</b>
	Includes all forms of processing other than peeling, cutting and surface treating fresh fruit in food category 04.1.1.2 and 04.1.1.3.
<b>04.1.2.1</b>	<b>Frozen fruit</b>
	Fruit that may or may not be blanched prior to freezing. The product may be frozen in a juice or sugar syrup.
<b>04.1.2.2</b>	<b>Dried fruit</b>
	Fruit from which water is removed to prevent microbial growth. Includes dried fruit leathers (fruit rolls) prepared by drying fruit purees.
<b>04.1.2.3</b>	<b>Fruit in vinegar, oil, or brine</b>
	Includes pickled products in which sugar may be added and can be either dried or not. Oriental pickled (“cured” or “preserved”) fruit products are sometimes referred to as “candied” fruit. Excluding candied fruit products of category 04.1.2.7 (i.e. dried, sugar coated fruit).
<b>04.1.2.4</b>	<b>Canned or bottled fruit</b>
	Fully preserved product in which fresh fruit is cleaned and placed in cans or jars with natural juice or sugar syrup (including artificially sweetened syrup) and heat-sterilized or pasteurized. Includes products processed in retort pouches.
<b>04.1.2.5</b>	<b>Jams, jellies and marmalades</b>
	<ul style="list-style-type: none"> <li>- Jams, preserves and conserves are thick, spreadable products prepared by boiling whole fruit or pieces of fruit, fruit pulp or puree, with or without fruit juice or concentrated fruit juice, and sugar to thicken, and to which pectin and fruit pieces may be added.</li> <li>- Jelly is a clear spreadable product prepared similarly to jam, except that it is has a smoother consistency and does not contain fruit pieces.</li> <li>- Marmalade is a thick spreadable fruit slurry prepared from whole fruit, fruit pulp or puree (usually citrus), and boiled with sugar to thicken, to which pectin and fruit pieces and fruit peel pieces may be added.</li> </ul>
<b>04.1.2.6</b>	<b>Fruit-based spreads for spread or raw materials</b>
	Includes all other fruit-based spreads and similar products of food category 04.1.2.5 made with non-nutritive high-intensity sweeteners.
<b>04.1.2.7</b>	<b>Candied fruits, glazed fruits and crystallized fruits</b>
	Includes glazed fruits (fruit treated with a sugar solution and dried), candied fruit (dried glazed fruit immersed in a sugar solution and dried so that the fruit is covered by a candy-like sugar shell), and crystallized fruit is prepared (dried glazed fruit rolled in icing or granulated sugar and dried).
<b>04.1.2.8</b>	<b>Fruit preparations including fruit pulp, fruit purees, fruit toppings and coconut milk</b>

	<ul style="list-style-type: none"> <li>- Fruit pulp is not usually intended for direct consumption. It is a slurry of lightly steamed and strained fresh fruit, with or without added preservatives.</li> <li>- Fruit puree is produced in the same way, but has a smoother, finer texture, and may be used as fillings for pastries, but is not limited to this use.</li> <li>- Fruit sauce is made from boiled fruit pulp with or without added sugar or sweeteners and may contain fruit pieces. Fruit sauce may be used as toppings for fine bakery wares and ice cream.</li> <li>- Fruit syrup is a more liquid form of fruit sauce that may be used as a topping</li> <li>- Coconut milk and coconut cream are products prepared using a significant amount of separated, whole, disintegrated macerated or comminuted fresh endosperm (kernel) of coconut palm and expelled, where most filterable fibers and residues are excluded, with or without coconut water, and/or with additional water. Coconut milk and coconut cream are treated by heat pasteurization, sterilization or ultrahigh temperature (UHT) processes. Coconut milk and coconut cream may also be produced in concentrated or skim (or “light”) forms.</li> </ul> <p>Includes traditional foods in this sub-category are: tamarind concentrate (clean extract of tamarind fruit with not less than 65% total soluble solids), tamarind powder (tamarind paste mixed with tapioca starch), tamarind toffee (mixture of tamarind pulp, sugar, milk solids, antioxidants, flavours, stabilizers and preservatives), and fruit bars (a mixture of fruit pulp mixed with sugar, flavours and preservatives, dried into a sheet).</p>
<b>04.1.2.9</b>	<b>Fruit-based desserts</b>
	Includes the ready-to-eat products and mixes. Includes water based fruit-flavoured desserts. Excluding fine bakery wares containing fruit (07.2.1 and 07.2.2), fruit-flavoured edible ices (03.0), or fruit-containing frozen dairy desserts (01.7).
<b>04.1.2.10</b>	<b>Fermented fruit products</b>
	Type of pickled product produced by preservation in salt by lactic acid fermentation.
<b>04.1.2.11</b>	<b>Fruit fillings</b>
	Includes the ready-to-eat products and mixes. These fillings usually include whole fruit or fruit pieces. Includes all type of fillings excluding purees (04.1.2.8)
<b>04.1.2.12</b>	<b>Cooked fruit</b>
	Fruit that is steamed, boiled, baked, or fried, with or without a coating, for presentation to the consumer.
<b>04.2</b>	<b>Vegetables, seaweeds, nuts and seeds</b>
	Includes all fresh (04.2.1) and processed (04.2.2) products.
<b>04.2.1</b>	<b>Fresh vegetables, seaweeds, nuts and seeds</b>
	Fresh vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds are generally free of additives. However, fresh vegetables that are coated or cut or peeled for presentation to the consumer may contain additives.

<b>04.2.1.1</b>	<b>Untreated fresh vegetables, seaweeds, nuts and seeds</b>
	Raw Fresh vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds presented fresh from harvest.
<b>04.2.1.2</b>	<b>Surface-treated fresh vegetables, seaweeds, nuts and seeds</b>
	The surfaces of certain fresh vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds are coated with glazes or waxes or are treated with other food additives that act as protective coatings and/or help to preserve the freshness and quality of the vegetable.
<b>04.2.1.3</b>	<b>Peeled, cut or shredded fresh vegetables, seaweeds, nuts and seeds</b>
	Fresh vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds that are presented to the consumer to be cooked at home.
<b>04.2.2</b>	<b>Processed vegetables, seaweeds, nuts and seeds</b>
	Includes all forms of processing other than peeling, cutting and surface treating fresh vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds in food category 04.2.1.2 and 04.2.1.3.
<b>04.2.2.1</b>	<b>Frozen vegetables, seaweeds, nuts and seeds</b>
	Fresh vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds are usually blanched and frozen or quick-frozen.
<b>04.2.2.2</b>	<b>Dried vegetables, seaweeds, nuts and seeds</b>
	Products in which the natural water content has been reduced below that critical for growth for microorganisms without affecting the important nutrients. The product may or may not be intended for rehydration prior to consumption. Includes vegetable powders that are obtained from drying the juice.
<b>04.2.2.3</b>	<b>Vegetables and seaweeds in vinegar, oil, brine, or soybean sauce</b>
	Products prepared by treating raw vegetables with salt solution and soaked in vinegar, oil, brine, or soybean sauce. Excluding fermented soybean products, are classified in 06.8.6, 06.8.7, 12.9.1, 12.9.2.1 and 12.9.2.3 and fermented vegetables, which are a type of pickled product, are classified in 04.2.2.7
<b>04.2.2.4</b>	<b>Canned or bottled or retort pouch vegetables and seaweeds</b>
	Fully preserved product in which fresh vegetables are cleaned, blanched, and placed in cans or jars in liquid (e.g. brine, water, oil or sauce), and heat-sterilized or pasteurized.

<b>04.2.2.5</b>	<b>Vegetable, seaweed, nut and seed purees and spreads</b>
	Vegetable purees are finely dispersed slurries prepared from the concentration of vegetables, which may have been previously heat-treated (e.g. steamed). The slurries may be filtered prior to packaging. Purees contain lower amounts of solids than pastes (found in category 04.2.2.6).
<b>04.2.2.6</b>	<b>Vegetable, seaweed, nut and seed pulps and preparations</b>
	Vegetable pastes and pulps are prepared as described for vegetable purees (category 04.2.2.5). However, pastes and pulps have a higher amount of solids, and are usually used as components of other foods. Excluding Vegetable purees and spreads in category 04.2.2.5
<b>04.2.2.7</b>	<b>Fermented vegetable and seaweed products</b>
	Fermented vegetables are a type of pickled product, formed by the action of lactic acid bacteria, usually in the presence of salt. Traditional Oriental fermented vegetable products are prepared by air-drying vegetables and exposing them to ambient temperatures so as to allow the microorganisms to flourish; the vegetables are then sealed in an anaerobic environment and salt (to generate lactic acid), spices and seasonings are added. Excluding vegetables and seaweeds in vinegar, oil, brine, or soybean sauce in category 04.2.2.3 and fermented soybean products, are classified in 06.8.6, 06.8.7, 12.9.1, 12.9.2.1 and 12.9.2.3
<b>04.2.2.8</b>	<b>Cooked or fried vegetables and seaweeds</b>
	Vegetables that are steamed, boiled, baked, or fried, with or without a coating, for presentation to the consumer.
<b>05.0</b>	<b>Confectionery</b>
	Includes all cocoa and chocolate products (05.1), other confectionery products that may or may not contain cocoa (05.2), chewing gum (05.3), and decorations and icings (05.4), or foods produced solely with any combination of foods conforming to these sub-categories.
<b>05.1</b>	<b>Cocoa products and chocolate products including imitations and chocolate substitutes</b>
	This category is divided to reflect the variety of standardized and non-standardized cocoa- and chocolate based products.
<b>05.1.1</b>	<b>Cocoa mixes (powders), cocoa mass and cocoa cake</b>
	Includes a variety of products that are used in the manufacture of other chocolate products or in the preparation of cocoa-based beverages. (1) Cocoa nib, which is obtained from cocoa beans that have been cleaned and freed from the shells. (2) Cocoa mass is obtained from the mechanical disintegration of the nib. Depending on the desired finished chocolate product, the cocoa nib or mass may be treated by an alkalinization process that mellows the flavour.

	<p>(3) Cocoa dust is the fraction of the cocoa bean produced as a product during winnowing and degerming.</p> <p>(4) Cocoa liquor is a homogeneous flowing paste produced from the cocoa nib, which has been roasted, dried, disintegrated and milled.</p> <p>(5) Cocoa powder is produced by reducing the fat content of cocoa mass or liquor by pressing (including expeller pressing) and molding into a cocoa press cake. The cocoa press cake is disintegrated and ground to cocoa powder.</p> <p>(6) Cocoa-sugar mixtures contain only cocoa powder and sugar. Chocolate powder for beverages is made from cocoa liquor or cocoa powder and sugar to which flavouring (e.g. vanillin) may be added.</p> <p>Includes chocolate powder or cocoa mixes powders for preparing the hot beverage or sugar-cocoa confectionery. Excluding cocoa beverages and chocolate milk are included in category 01.1.4, and most finished chocolate products are included in category 05.1.4.</p>
<b>05.1.2</b>	<b>Cocoa mixes (syrups)</b>
	<p>Products that may be produced by adding a bacterial amylase to cocoa liquor. The enzyme prevents the syrup from thickening or setting by solubilizing and dextrinizing cocoa starch. Includes products such as chocolate syrup used to prepare chocolate milk or hot chocolate. Excluding Chocolate syrup differs from fudge sauce (e.g. for ice cream), which is found in category 05.4.</p>
<b>05.1.3</b>	<b>Cocoa-based spreads, for spread, fillings and raw materials</b>
	<p>Products in which cocoa is mixed with other ingredients (usually fat-based) to prepare a spreadable paste that is used as a spread for bread or as a filling for fine bakery wares.</p>
<b>05.1.4</b>	<b>Cocoa and chocolate products</b>
	<p>Chocolate is produced from cocoa nibs, mass, press cake, powder, or liquor with or without addition of sugar, cocoa butter, aroma or flavouring substances, and optional ingredients (e.g. nuts). Includes chocolate covered in a sugar-based "shell" or with coloured decorations. This category is for chocolate as defined in the Notification of the Ministry of Public Health, Re: Chocolate and Chocolate Products.</p>
<b>05.1.5</b>	<b>Imitation chocolate, chocolate substitute products</b>
	<p>Includes chocolate-like products that may or may not be cocoa-based, but have similar organoleptic properties as chocolate, such as carob chips, and cocoa-based products that contain greater than 5% vegetable fat (other than cocoa butter) that are excluded from the scope of the Notification of the Ministry of Public Health, Re: Chocolate and Chocolate Products.</p>



<b>05.2</b>	<b>Confectionery including candy, nougats and marzipans</b>
	Includes all types of products that primarily contain sugar and their dietetic counterparts and may or may not contain cocoa. Includes hard candy (05.2.1), soft candy (05.2.2), and nougats and marzipans (05.2.3).
<b>05.2.1</b>	<b>Hard candy</b>
	Products made from water and sugar (simple syrup), colour and flavour that may or may not have a filling and products that may or may not contain cocoa. These types of products may be used as fillings for chocolate products within the scope of food categories 05.1.4 and 05.1.5.
<b>05.2.2</b>	<b>Soft candy and other desserts, excluding products of food categories 01.7, 02.4, 04.1.2.9 and 06.5</b>
	Products include soft, chewy products such as caramels (containing sugar syrup, fats, colour and flavour) and products that may or may not contain cocoa and milk includes other soft desserts that may contain gelatin, pectin, agar, carrageenan or other food additive which provide the functional gelling agent. These types of products may be used as fillings for chocolate products within the scope of food categories 05.1.4 and 05.1.5. Excluding dessert products in categories 01.7, 02.4, 04.1.2.9 and 06.5
<b>05.2.3</b>	<b>Nougats and marzipans</b>
	<ul style="list-style-type: none"> <li>- Nougats consist of roasted ground nuts, sugar and cocoa and their dietetic counterparts, that may be consumed as is, or may be used as a filling for chocolate products within the scope of food categories 05.1.4 and 05.1.5.</li> <li>- Marzipan consists of almond paste and sugar and their dietetic counterparts, that may be shaped and coloured for direct consumption, or may be used as a filling for chocolate products within the scope of food categories 05.1.4 and 05.1.5.</li> </ul>
<b>05.3</b>	<b>Chewing gum</b>
	Product made from natural or synthetic gum base containing flavours, sweeteners (nutritive or non-nutritive), aroma compounds, and other additives.
<b>05.4</b>	<b>Decorations, toppings and sweet sauces</b>
	Includes ready-to-eat icings and frostings for cakes, cookies, pies and bread and flour confectionery, as well as mixes for these products. Excluding syrups (e.g. maple, caramel, and flavoured syrups for fine bakery wares and ices) included in category 11.4, Fruit-based toppings are included in 04.1.2.8 and Chocolate sauce is included in 05.1.2.
<b>06.0</b>	<b>Cereals and cereal products</b>
	Includes unprocessed (06.1) and various processed forms of cereal and cereal-based products. Excluding Bakery wares in category 07.0.
<b>06.1</b>	<b>Whole, broken, or flaked cereals and grains</b>
	Includes whole, husked, unprocessed cereals and grains.

<b>06.2</b>	<b>Flours and starches</b>
	The basic milled products of cereal grains, roots, tubers, pulses, pith or softy core of palm tree or legumes sold as such or used as ingredients.
<b>06.2.1</b>	<b>Flours</b>
	Flour is produced from the milling of grain, cereals and tubers (e.g. cassava) and pith or soft core of palm tree. Excluding mixes for bakery wares in category 07.1.6 and 07.2.3.
<b>06.2.2</b>	<b>Starches</b>
	Starch is a glucose polymer occurring in granular form in certain plant species, notably seeds (e.g. cereals, pulses, corn, wheat, rice, beans, peas) and tubers (e.g. tapioca, potato). The polymer consists of linked anhydro-alpha-D-glucose units. Native starch is separated by processes that are specific for each raw material.
<b>06.3</b>	<b>Breakfast cereals</b>
	Includes all ready-to-eat, instant, and regular hot breakfast cereal products. Includes breakfast cereals made from soy or bran, and extruded-type breakfast cereals made from grain flour or powder. This includes cereal bar made by primary processing, such as drying or baking, semi-processing with seasoning is either added or not, such as sugar-coated or fruit or vegetable added or others cereal ingredients.
<b>06.4</b>	<b>Pastas and noodles and like products</b>
	This food category was revised, with the understanding that there would be few, if any additives needed in dried pastas and noodles. Includes all pasta, noodle and similar products.
<b>06.4.1</b>	<b>Fresh pastas and noodles and like products</b>
	Products that are untreated (i.e. not heated, boiled, steamed, cooked, pre-gelatinized or frozen) and are not dehydrated.
<b>06.4.1.1</b>	<b>Non-treated fresh pastas and noodles and like products</b>
	Products that are untreated (i.e. not heated, boiled, steamed, cooked, pre-gelatinized or frozen) and are not dehydrated. These products are intended to be consumed soon after preparation.
<b>06.4.1.2</b>	<b>Treated fresh pastas and noodles and like products</b>
	Products that are untreated (i.e. not heated, boiled, steamed, cooked, pre-gelatinized or frozen) and are not dehydrated. These products are ready-to-eat or intended to be consumed soon after preparation.
<b>06.4.2</b>	<b>Dried pastas and noodles and like products</b>
	Products that are untreated (i.e. not heated, boiled, steamed, cooked, pre-gelatinized or frozen) and are dehydrated. Products are contained moisture less than 14%

<b>06.4.2.1</b>	<b>Non-treated dried pastas and noodles and like products</b>
	Pastas and noodles and like products specified under category 06.4.1.1 are further treated-dried for dehydration.
<b>06.4.2.2</b>	<b>Treated dried pastas and noodles and like products</b>
	Pastas and noodles and like products specified under category 06.4.1.2 are further treated-dried for dehydration.
<b>06.4.3</b>	<b>Pre-cooked pastas and noodles and like products</b>
	Products that are treated (i.e. heated, boiled, steamed, cooked, pre-gelatinized or frozen). These products may be sold directly to the consumer (e.g. pre-cooked, chilled gnocchi to be heated prior to consumption), or may be the starch component of prepared meals. Also includes instant noodles that are pre-gelatinized, heated and dried prior to sale to the consumer.
<b>06.5</b>	<b>Cereal and starch based desserts</b>
	Dessert products containing cereal, starch or grain as the main ingredient. Also includes cereal- or starch based fillings for desserts.
<b>06.6</b>	<b>Batters</b>
	Products containing flaked or ground cereal or grain that when combined with other ingredients (e.g. egg, water, milk) are used as a coating for fish or poultry. Excluding doughs for bread are found in 07.1.4 and other mixes for bakery wares are found in 07.1.6 and 07.2.3, respectively.
<b>06.7</b>	<b>Pre-cooked or processed rice products</b>
	Products prepared from rice that is soaked, drained, steamed, kneaded and shaped into cake forms. Products would also include processed rice and enriched rice products, such as pre-cooked products that are sold canned, chilled or frozen; and processed rice products sold in retort pouches. Excluding crisp snacks made from rice grains are categorized in 15.1, and dessert-type rice cakes are in 06.5.
<b>06.8</b>	<b>Soybean products</b>
	Includes dried, cooked, fried or fermented soybean products, and soybean curd products. Excluding soybean-based seasonings and condiments are categorized in 12.9
<b>06.8.1</b>	<b>Soybean-based beverages</b>
	Products prepared from dried soybeans that are soaked in water, pureed, boiled and strained, or prepared from soybean flour, soybean concentrate, or soybean isolate. Soybean-based beverages may be consumed as is, or used to prepare other soybean products. Products may be contain fruit cereal sugar or sweetener. Also includes soybean products, such as soybean-based beverage powder, which is sold as is, for reconstitution, or as a mix containing a coagulant that can be reconstituted by the consumer for preparation of home-made soft tofu and fermented soybean-based beverages.

<b>06.8.2</b>	<b>Soybean-based beverage film</b>
	Film formed on the surface of boiling soybean-based beverage that is dried. It may be deep-fried or softened in water prior to use in soups or poached food.
<b>06.8.3</b>	<b>Soybean curd</b>
	Soybean curd is prepared from dried soybeans that are soaked in water, pureed, and strained to produce soybean-based beverage, which is then made into a curd with a coagulant, and placed in a mould. Soybean curds may be of a variety of textures (e.g. soft, semi-firm, firm).
<b>06.8.4</b>	<b>Semi-dehydrated soybean curd</b>
	Soybean curd that has been pressed while being moulded into blocks so that some moisture has been removed, but so that it is not completely dried. Semi-dehydrated soybean curd typically contains 62% water, and has a chewy texture.
<b>06.8.4.1</b>	<b>Thick gravy-stewed semi-dehydrated soybean curd</b>
	Partially dehydrated soybean curd that is cooked (stewed) with a thick sauce (e.g. miso sauce). The partially dehydrated soybean curd typically absorbs the sauce, and so regains its original texture.
<b>06.8.4.2</b>	<b>Deep fried semi-dehydrated soybean curd</b>
	Partially dehydrated soybean curd that is deep-fried. It may be consumed as such, or cooked (e.g. stewed in sauce) after frying.
<b>06.8.4.3</b>	<b>Other Semi-dehydrated soybean curd</b>
	Partially dehydrated soybean curd prepared other than by stewing in thick (e.g. miso) sauce or by deepfrying. Includes grilled products and mashed products that may be combined with other ingredients. Excluding thick gravy-stewed semi-dehydrated soybean curd (06.8.4.1) and deep fried semi-dehydrated soybean curd (06.8.4.2)
<b>06.8.5</b>	<b>Dehydrated soybean curd</b>
	Soybean curd from which all moisture has been removed through the process of freezing, aging, and dehydrating. It may be reconstituted with water or sauce for consumption, or is used directly in prepared dishes. It may also be deep-fried or simmered in sauce.
<b>06.8.6</b>	<b>Fermented soybeans</b>
	The product is prepared from soybeans that have been steamed and fermented with certain fungi or bacteria (starter). The soft, whole beans have a distinctive aroma and taste.
<b>06.8.7</b>	<b>Fermented soybean curd</b>
	The product is prepared by forming soybean curd into a loaf during the fermentation process. It is a soft, flavoured product, either in red, rice-yellow, or grey-green.

<b>06.8.8</b>	<b>Other soybean protein products</b>
	Other products from soybeans composed mainly of soybean protein such as extruded, textured, concentrated, and isolated soybean protein.
<b>07.0</b>	<b>Bakery wares</b>
	Includes products consisted of flour from gluten-containing cereals, such as wheat flour, barley flour, rye flour, etc. or flour from gluten-free cereals, such as maize flour, rice flour, etc. then the products are heated such as baking, steaming, frying, etc.
<b>07.1</b>	<b>Bread and ordinary bakery wares and mixes</b>
	Includes all types of non-sweet bakery products and bread-derived products.
<b>07.1.1</b>	<b>Breads and rolls</b>
	Includes yeast-leavened and specialty breads and soda bread.
<b>07.1.1.1</b>	<b>Yeast-leavened breads and specialty breads</b>
	Includes all types of non-sweet yeast-leavened breads and rolls.
<b>07.1.1.2</b>	<b>Soda breads</b>
	Includes all types of non-sweet soda (e.g. sodium bicarbonate, baking soda) - leavened breads and rolls.
<b>07.1.2</b>	<b>Crackers, excluding sweet crackers</b>
	The term “cracker” refers to a thin, crisp wafer, usually of unsweetened dough. Excluding flavoured crackers (e.g. cheese flavoured) that are consumed as snacks are in 07.2.1.
<b>07.1.3</b>	<b>Other ordinary bakery products</b>
	Includes all other ordinary bakery wares, such as cornbread and biscuits. The term “biscuit” in this category refers to a small cake of shortened bread, leavened with baking powder or baking soda. Excluding the British “biscuit,” which is a “cookie” or “sweet cracker” included in category 07.2.1.
<b>07.1.4</b>	<b>Bread-type products</b>
	Includes bread-based products such as croutons, bread stuffing and stuffing mixes, and prepared doughs (e.g. for biscuits). Excluding bread mixes are included in category 07.1.6.
<b>07.1.5</b>	<b>Steamed breads and buns</b>
	Oriental-style leavened or not leavened wheat or rice products that are cooked in a steamer. Products may be made with or without filling.
<b>07.1.6</b>	<b>Mixes for bread and ordinary bakery wares products of food categories 07.1.1-07.1.5</b>
	Includes all the mixes containing the dry ingredients to which wet ingredients (e.g. water, milk, oil, butter, eggs) are added to prepare a dough for baked goods from food categories 07.1.1 to 07.1.5. Excluding mixes for fine bakery wares products in category 07.2.3.

<b>07.2</b>	<b>Fine bakery wares and mixes</b>
	Includes sub-categories for ready-to-eat products (07.2.1 and 07.2.2) as well as mixes (07.2.3) for preparing fine baked goods.
<b>07.2.1</b>	<b>Cakes, cookies and pies</b>
	The term “sweet cracker” or “sweet biscuit” used in this category refers to a cookie-like product that may be eaten as a dessert.
<b>07.2.2</b>	<b>Other fine bakery products</b>
	Includes products that may be eaten as a dessert or as breakfast. Include flavoured yeast-leavened products and flavoured soda-leavened products, flour confectionary.
<b>07.2.3</b>	<b>Mixes for fine bakery wares products of food categories 07.2.1-07.2.2</b>
	Mixes containing the dry ingredients to which wet ingredients (e.g. water, milk, oil, butter, eggs) are added to prepare a dough for fine baked goods. Excluding prepared dough is found in category 07.1.4. Mixes for ordinary bakery wares is found in category 07.1.6.
<b>08.0</b>	<b>Meat and meat products</b>
	This category includes all types of meat, poultry, and game products, in pieces and cuts or comminuted, fresh (08.1) and processed (08.2 and 08.3).
<b>08.1</b>	<b>Fresh meat, poultry, and game</b>
	Fresh products are usually free of additives. However, in certain circumstances, additives are necessary. For example, colours are used for certification stamps on the surfaces of fresh cuts of meat, and are indicated in the Food Category System with a notation for “stamping, marking or branding the product.” Additionally, coatings, such as glazes and spice rubs, may be applied to meat products prior to marketing to the consumer (e.g. glazed ham, and barbecued chicken). In the Food Category System, this is indicated with a notation for “use as a glaze or coating (surface treatment).” It should be noted that the coatings marketed <i>per se</i> are included in food categories 04.1.2.8 (fruit-based glazes, e.g. for ham) and 12.2 (spice rubs).
<b>08.1.1</b>	<b>Fresh meat, poultry and game, whole pieces or cuts</b>
	Untreated raw meat, poultry and game carcasses and cuts.
<b>08.1.2</b>	<b>Fresh meat, poultry and game, comminuted</b>
	Untreated raw comminuted or mechanically deboned meat, poultry and game, with or without breading or coating.
<b>08.2</b>	<b>Processed meat, poultry, and game products in whole pieces or cuts</b>
	Includes various treatments for non-heat treated meat cuts (08.2.1) and heat-treated meat cuts (08.3.2).

<b>08.2.1</b>	<b>Non-heat treated processed meat, poultry, and game products in whole pieces or cuts</b>
	This category describes several treatment methods (e.g. curing, salting, drying, pickling) that preserve and extend the shelf life of meats.
<b>08.2.1.1</b>	<b>Cured (including salted) non-heat treated processed meat, poultry, and game products in whole pieces or cuts</b>
	Salted products are treated with sodium chloride. Dry cured (dry pickled) products are prepared by rubbing salt directly on the meat surface. Wet pickle cured products are prepared by submerging the meat in a brine solution. Pump cured products are prepared by injecting brine into the meat. Curing may also be achieved by addition of additives. Smoked products are also included here.
<b>08.2.1.2</b>	<b>Cured (including salted) and dried non-heat treated processed meat, poultry, and game products in whole pieces or cuts</b>
	The meat cuts may be cured or salted as described for category 08.2.1.1, and then dried, or they may only be dried. Drying is achieved either in hot air or in vacuum.
<b>08.2.1.3</b>	<b>Fermented non-heat treated processed meat, poultry, and game products in whole pieces or cuts</b>
	Fermented products are a type of pickled product produced by the action of lactic acid bacteria in the presence of salt.
<b>08.2.2</b>	<b>Heat-treated processed meat, poultry, and game products in whole pieces or cuts</b>
	Includes cooked (including cured and cooked, and dried and cooked), heat-treated (including sterilized) and canned meat cuts.
<b>08.2.3</b>	<b>Frozen processed meat, poultry and game products in whole pieces or cuts</b>
	Includes raw and cooked meat cuts that have been frozen.
<b>08.3</b>	<b>Processed comminuted meat, poultry, and game products</b>
	Includes various treatments for non-heat treated products (08.3.1) and heat-treated products (08.3.2).
<b>08.3.1</b>	<b>Non-heat treated processed comminuted meat, poultry, and game products</b>
	This category describes several treatment methods (e.g. curing, salting, drying, pickling) that preserve and extend the shelf life of comminuted and mechanically deboned meat products.
<b>08.3.1.1</b>	<b>Cured (including salted) non-heat treated processed comminuted meat, poultry, and game products</b>
	Salted products are treated with sodium chloride. Dry cured (dry pickled) products are prepared by rubbing salt directly on the meat surface. Wet pickle cured products are prepared by submerging the meat in a brine solution. Pump cured products are prepared by injecting brine into the meat. Curing may also be achieved by addition of additives. Also includes smoked products.

<b>08.3.1.2</b>	<b>Cured (including salted) and dried non-heat treated processed comminuted meat, poultry, and game products</b>
	The comminuted or mechanically deboned products may be cured or salted as described for category 08.3.1.1, and then dried, or they may only be dried. Drying is achieved either in hot air or in vacuum.
<b>08.3.1.3</b>	<b>Fermented non-heat treated processed comminuted meat, poultry, and game products</b>
	Fermented products are a type of pickled product produced by the action of lactic acid bacteria in the presence of salt.
<b>08.3.2</b>	<b>Heat-treated processed comminuted meat, poultry, and game products</b>
	Includes cooked (including cured and cooked, and dried and cooked), heat-treated (including sterilized) and canned comminuted products.
<b>08.3.3</b>	<b>Frozen processed comminuted meat, poultry, and game products</b>
	Includes raw, partially cooked and fully cooked comminuted or mechanically deboned meat products that have been frozen.
<b>08.4</b>	<b>Edible casings</b>
	Casings or tubing prepared from collagen, cellulose, or food-grade synthetic material or from natural sources that contain the sausage mix.
<b>09.0</b>	<b>Fish and fish products</b>
	This broad category is divided into categories for fresh fish (09.1) and various processed fish products (09.2– 09.4). This category includes aquatic vertebrates (fish and aquatic mammals (e.g. whales)), aquatic invertebrates (e.g. jellyfish), as well as molluscs (e.g. clams, snails), crustaceans (e.g. shrimp, crab, lobster), and echinoderms (e.g. sea urchins, sea cucumbers). Fish products may be treated with coatings, such as glazes and spice rubs, prior to marketing to the consumer (e.g. glazed frozen fish fillets). In the Food Category System, this is indicated with a notation for “use as a glaze or coating (surface treatment).”
<b>09.1</b>	<b>Fresh fish and fish products</b>
	The term “fresh” refers to fish and fish products that are untreated except for refrigeration, storage on ice, or freezing upon catching at sea or in lakes or other bodies of water in order to prevent decomposition and spoilage.
<b>09.1.1</b>	<b>Fresh fish</b>
	Includes fresh fish and fresh fish roe.
<b>09.1.2</b>	<b>Fresh molluscs, crustaceans, and echinoderms</b>
	Includes fresh molluscs, crustaceans, and echinoderms
<b>09.2</b>	<b>Processed fish and fish products</b>
	This category refers to fish products that are frozen and may require further cooking, as well as ready-to-eat cooked, smoked, dried, fermented, and salted products.



<b>09.2.1</b>	<b>Frozen fish, fish fillets, and fish products</b>
	Fresh, including partially or fully cooked, fish subjected to freezing or quick-freezing at sea and on land for further processing.
<b>09.2.2</b>	<b>Frozen battered fish, fish fillets and fish products</b>
	Uncooked or partially cooked product prepared from fish or fish portions, with dressing in eggs and bread crumbs or batter. Products have been frozen or quick-frozen.
<b>09.2.3</b>	<b>Frozen minced and creamed fish products</b>
	Uncooked product prepared from minced fish pieces in cream-type sauce. Products have been frozen or quick-frozen.
<b>09.2.4</b>	<b>Cooked and/or fried fish and fish products</b>
	Includes all ready-to-eat cooked products
<b>09.2.4.1</b>	<b>Cooked fish and fish products</b>
	Cooked products include steamed, boiled or any other cooking method except frying. Excluding fried fish and fish products in 09.2.4.3 and traditional Oriental fish paste in 09.3.4
<b>09.2.4.2</b>	<b>Cooked molluscs, crustaceans, and echinoderms</b>
	Cooked products include steamed, boiled or any other cooking method except frying. Excluding fried fish and fish products in 09.2.4.3
<b>09.2.4.3</b>	<b>Fried fish and fish products</b>
	Ready-to-eat products prepared from fish or fish portions, with or without further dressing in eggs and bread crumbs or batter, that are fried, baked, roasted or barbecued, and then packaged or canned with or without sauce or oil.
<b>09.2.5</b>	<b>Smoked, dried, fermented, cured and/or salted fish and fish products</b>
	<ul style="list-style-type: none"> <li>- <u>Smoked fish</u> are usually prepared from fresh deep frozen or frozen fish that are dried directly or after boiling, with or without salting, by exposing the fish to freshly-generated sawdust smoke.</li> <li>- <u>Dried fish</u> are prepared by exposing the fish to sunlight or drying directly or after boiling in a special installation; the fish may be salted prior to drying.</li> <li>- <u>Salted fish</u> are either rubbed with salt or placed in a salt solution. This manufacturing process is different from that described in food category 09.3 for marinated and pickled fish.</li> <li>- <u>Cured fish</u> is prepared by salting and then smoking fish.</li> <li>- <u>Fermented fish</u> are a type of pickled product produced by the action of lactic acid bacteria in the presence of salt.</li> </ul>
<b>09.3</b>	<b>Semi-preserved fish and fish products</b>
	Includes products treated by methods such as marinating, pickling and partial cooking that have a limited shelf life.

<b>09.3.1</b>	<b>Fish and fish products marinated in vinegar or wine</b>
	Marinated products are manufactured by soaking the fish in vinegar or wine with or without added salt and spices. They are packaged in jars or cans and have a limited shelf life. Products in jelly may be manufactured by tenderizing fish products by cooking or steaming, adding vinegar or wine, salt and preservatives, and solidifying in a jelly.
<b>09.3.2</b>	<b>Pickled fish and fish products</b>
	Pickled products are sometimes considered a type of marinated product. Pickling results from the treatment of the fish with a brine and vinegar or alcohol (e.g. wine) solution.
<b>09.3.3</b>	<b>Caviar and other fish roe products</b>
	Roe is usually produced by washing, salting and allowing to ripen until transparent. The roe is then packaged in glass or other suitable containers. The term "caviar" refers only to the roe of the sturgeon species (e.g. beluga). Caviar substitutes are made of roe of various sea and freshwater fish (e.g. cod and herring) that are salted, spiced, dyed and may be treated with a preservative. Excluding fully preserved products are included in category 09.4, frozen products are included in category 09.2.1, cooked products are included in category 09.2.4.1 or smoked products are included in category 09.2.5 and fresh fish roe is found in category 09.1.1.
<b>09.3.4</b>	<b>Semi-preserved fish and fish products, excluding products of food categories 09.3.1 - 09.3.3</b>
	Include fish or crustacean pates and traditional Oriental fish paste. The latter is produced from fresh fish or the residue from fish sauce production, which is combined with other ingredients such as wheat flour, bran, rice or soybeans. The product may be further fermented.
<b>09.4</b>	<b>Fully preserved, including canned fish and fish products</b>
	Products with extended shelf life manufactured by pasteurizing or steam retorting and packaging in vacuum sealed air-tight containers to ensure sterility. Products may be packed in their own juice or in added oil or sauce. Excluding fully cooked products are included in category 09.2.4
<b>10.0</b>	<b>Eggs and egg products</b>
	Includes fresh in-shell eggs (10.1), products that may substitute for fresh eggs (10.2) and other egg products (10.3 and 10.4).
<b>10.1</b>	<b>Fresh eggs</b>
	Fresh in-shell eggs are not expected to contain additives. However, colours may be used for decorating, dyeing or stamping the exterior surfaces of shell eggs. In the Food Category System, a notation for "for decoration, stamping, marking or branding the product (surface treatment) accommodates this.

<b>10.2</b>	<b>Egg products</b>
	Products that may be used as replacement for fresh eggs in recipes or as a food. They are produced from fresh eggs by either (i) mixing and purifying the whole egg; or (ii) separating the egg white and yolk, and then mixing and purifying each separately. The purified whole egg, white or yolk is then further processed to produce liquid, frozen or dried eggs as described below.
<b>10.2.1</b>	<b>Liquid egg products</b>
	The purified whole egg, egg yolk or egg white is pasteurized and chemically preserved (e.g. by addition of salt).
<b>10.2.2</b>	<b>Frozen egg products</b>
	The purified whole egg, egg yolk or egg white is pasteurized and frozen.
<b>10.2.3</b>	<b>Dried and/or heat coagulated egg products</b>
	Sugars are removed from the purified whole egg, egg yolk or egg white, which is then pasteurized and dried.
<b>10.3</b>	<b>Preserved eggs</b>
	Includes traditional Oriental preserved products.
<b>10.4</b>	<b>Egg-based desserts</b>
	Includes ready-to-eat products and products to be prepared from a dry mix.
<b>11.0</b>	<b>Sweeteners, including honey</b>
	Includes all standardized sugars (11.1), non-standardized products (e.g. 11.2, 11.3, 11.4 and 11.6), and natural sweeteners (11.5 – honey).
<b>11.1</b>	<b>Refined and raw sugars</b>
	Nutritive sweeteners, such as fully or partially purified sucrose (derived from sugar beet and sugar cane), glucose (derived from starch), or fructose, that are included in sub-categories 11.1.1 to 11.1.5.
<b>11.1.1</b>	<b>White sugar, dextrose anhydrous, dextrose monohydrate and fructose</b>
	<ul style="list-style-type: none"> <li>- White sugar is purified and crystallized sucrose with a polarisation of not less than 99.7oZ.</li> <li>- Dextrose anhydrous is purified and crystallized D-glucose without water of crystallization.</li> <li>- Dextrose monohydrate is purified and crystallized D-glucose with one molecule of water of crystallization.</li> <li>- Fructose is purified and crystallized D-fructose.</li> </ul>
<b>11.1.2</b>	<b>Powdered sugar, powdered dextrose</b>
	<ul style="list-style-type: none"> <li>- Powdered sugar (icing sugar) is finely pulverized white sugar with or without added anticaking agents.</li> <li>- Powdered dextrose (icing dextrose) is finely pulverized dextrose anhydrous or dextrose monohydrate, or a mixture of the two, with or without added anticaking agents.</li> </ul>

<b>11.1.3</b>	<b>Soft white sugar, soft brown sugar, glucose syrup, dried glucose syrup and raw cane sugar</b>
	<ul style="list-style-type: none"> <li>- Soft white sugar is fine grain purified, moist sugar, that is white in colour.</li> <li>- Soft brown sugar is fine grain moist sugar that is light to dark brown in colour.</li> <li>- Glucose syrup is a purified concentrated aqueous solution of nutritive saccharides derived from starch and/or inulin.</li> <li>- Dried glucose syrup is glucose syrup from which water has been partially removed.</li> <li>- Raw cane sugar is partially purified sucrose crystallized from partially purified cane juice without further purification.</li> </ul>
<b>11.1.3.1</b>	<b>Dried glucose syrup used to food manufacture</b>
	Dried glucose syrup, as described in 11.1.3, used to manufacture food products that are included hard or soft candies in food category 05.2.
<b>11.1.3.2</b>	<b>Glucose syrup used to food manufacture</b>
	Glucose syrup, as described in 11.1.3, used to manufacture food products that are included hard or soft candies in food category 05.2.
<b>11.1.4</b>	<b>Lactose</b>
	A natural constituent of milk normally obtained from whey. It may be anhydrous, or contain one molecule of water of crystallization, or be a mixture of both forms.
<b>11.1.5</b>	<b>Plantation or mill white sugar</b>
	Purified and crystallized sucrose with a polarisation of not less than 99.5 °Z.
<b>11.2</b>	<b>Brown sugar</b>
	Includes large-grain, brown or yellow lump sugars. Excluding soft white sugar, soft brown sugar, glucose syrup, dried glucose syrup and raw cane sugar in food category 11.1.3.
<b>11.3</b>	<b>Sugar solutions and syrups</b>
	Includes co-products of the sugar refining process (e.g. treacle and molasses), invert sugar (equimolar mixture of glucose and fructose produced from the hydrolysis of sucrose), and other sweeteners, such as high fructose corn syrup, high fructose inulin syrup and corn sugar. Excluding soft white sugar, soft brown sugar, glucose syrup, dried glucose syrup and raw cane sugar in food category 11.1.3.
<b>11.4</b>	<b>Other sugars and syrups</b>
	Includes all types of table syrups, syrups for fine bakery wares and ices, and decorative sugar toppings.
<b>11.5</b>	<b>Honey</b>
	Honey is the natural sweet substance produced by honeybees from the nectar of blossoms or secretions of plants. The honeybees collect the nectar or secretions, transform it by combination with specific substances of the bees' own, and store it in a honeycomb to ripen and mature.

<b>11.6</b>	<b>Table-top sweeteners directly sold to consumers</b>
	Includes products that are preparations of high-intensity sweeteners and/or of polyols which may contain other additives and/or nutritive ingredients, such as carbohydrates. These products, which are sold to the final consumer, may be in powder, solid (e.g. tablets or cubes), or liquid form. Excluding sweeteners which used as food additive.
<b>12.0</b>	<b>Salts, spices, soups, sauces, salads and protein products</b>
	This is a broad category that includes substances added to food to enhance its aroma and taste (12.1 – salt and salt substitutes; 12.2 – herbs, spices, seasonings and condiments; 12.3 – vinegars; and 12.4 - mustards), certain prepared foods (12.5 – soups and broths; 12.6 – sauces and like products; and 12.7 – salads and sandwich spreads and products composed primarily of protein that are derived from soybeans or from other sources (12.9 – soybean based seasonings and condiments; and 12.10 – protein products other than from soybeans).
<b>12.1</b>	<b>Salt and salt substitutes</b>
	Includes salt (12.1.1.) and salt substitutes (12.1.2) used as seasoning for food.
<b>12.1.1</b>	<b>Salt</b>
	Primarily food-grade sodium chloride. Includes table salt, iodized and fluoride iodized salt, and dendritic salt.
<b>12.1.2</b>	<b>Salt substitutes</b>
	Salt substitutes are seasonings with reduced sodium content intended to be used on food in place of salt.
<b>12.2</b>	<b>Herbs, spices, seasonings, and condiments</b>
	This category describes items whose use is intended to enhance the aroma and taste of food.
<b>12.2.1</b>	<b>Herbs and spices</b>
	Herbs and spices are usually derived from botanical sources, and may be dehydrated, and either ground or whole. Spices may also be found as blends in powder or paste form.
<b>12.2.2</b>	<b>Seasonings and condiments</b>
	Condiments include seasonings, excluding condiment sauces (e.g. ketchup, mayonnaise, mustard) or relishes.
<b>12.3</b>	<b>Vinegars</b>
	Liquid produced from fermentation of ethanol from a suitable source (e.g. wine, cider). Include distilled vinegar (distillation of fermented vinegar)
<b>12.4</b>	<b>Mustards</b>
	Condiment sauce prepared from ground, often defatted mustard seed that is mixed into a slurry with water, vinegar, salt, oil and other spices and refined.

<b>12.5</b>	<b>Soups and broths</b>
	Includes ready-to-eat soups and mixes. The finished products may be water- or milk- or coconut milk- or cream-based.
<b>12.5.1</b>	<b>Ready-to-eat soups and broths</b>
	Water- or milk-based products consisting of vegetable, meat or fish broth with or without other ingredients (e.g. vegetables, meat, noodles). Include canned, bottled, and frozen ready-to-eat products.
<b>12.5.2</b>	<b>Mixes for soups and broths</b>
	Concentrated soup to be reconstituted with water and/or milk, with or without addition of other optional ingredients (e.g. vegetables, meat, noodles). Include powdered cubes paste and condensed form.
<b>12.6</b>	<b>Sauces and like products</b>
	Includes ready-to-eat sauces, gravies and dressings, and mixes to be reconstituted before consumption. The ready-to eat products are divided into sub-categories for emulsified (12.6.1) and non-emulsified (12.6.2) products, whereas the sub-category for the mixes (12.6.3) encompasses both emulsified and non-emulsified sauce mixes and clear sauces (12.6.4).
<b>12.6.1</b>	<b>Emulsified sauces and dips</b>
	Sauces, gravies, dressings based and dips, at least in part, on a fat- or oil-in water emulsion or by homogenization leading that the finished product is homogeneous characteristic.
<b>12.6.2</b>	<b>Non-emulsified sauces</b>
	Include water- or milk- or coconut milk- or cream-based sauces, gravies and dressings. Include white (cream-based) sauce (sauce consisting primarily of milk or cream, with little added fat (e.g. butter) and flour, with or without seasoning or spices).
<b>12.6.3</b>	<b>Mixes for sauces and gravies</b>
	Concentrated product, usually in powdered cubes paste and condensed form, to be mixed with water, milk, oil or other liquid to prepare a finished sauce or gravy in food category 12.6.1 or 12.6.2.
<b>12.6.4</b>	<b>Clear sauces</b>
	Includes thin, non-emulsified clear sauces that may be water-based. These sauces may be used as condiments or ingredients rather than as finished gravy.
<b>12.7</b>	<b>Salads and sandwich spreads</b>
	<ul style="list-style-type: none"> <li>- Ready-to-eat mixed salads in which vegetable noodle or meat is either added or not. This includes milk-based spreads.</li> <li>- Sandwich spreads mean products made from vegetable oil or emulsion products mixed by vegetable oil and egg yolk. This may be added with pickled vegetables and seasoned with Vinegar and/or lemonade and others ingredients such as meats for seasoning.</li> </ul> <p>Excluding vegetable, seaweed, nut and seed purees and spreads (04.2.2.5) and cocoa-based spreads, for spread, fillings and raw materials (05.1.3)</p>

<b>12.8</b>	<b>Yeast and like products</b>
	Includes baker's yeast and leaven used in the manufacture of baked goods.
<b>12.9</b>	<b>Soybean-based seasonings and condiments</b>
	Includes products that are derived from soybeans and other ingredients intended for use as seasonings and condiments, such as fermented soybean paste and soybean sauces.
<b>12.9.1</b>	<b>Fermented soybean paste</b>
	The product is made of soybeans, salt, water and other ingredients, using the process of fermentation. The product may be used in the preparation of soups or dressings, or as a seasoning.
<b>12.9.2</b>	<b>Soybean sauce</b>
	A liquid seasoning obtained by fermentation of soybeans, non-fermentation (e.g. hydrolysis) of soybeans, or by hydrolysis of vegetable protein.
<b>12.9.2.1</b>	<b>Fermented soybean sauce</b>
	A clear, non-emulsified sauce made of soybeans, cereal, salt and water by the fermentation process.
<b>12.9.2.2</b>	<b>Non-fermented soybean sauce</b>
	Non-fermented soybean sauce, which is also known as non-brewed soybean sauce, may be produced from vegetable proteins, such as defatted soybeans that are acid-hydrolyzed (e.g. with hydrochloric acid), neutralized (e.g. with sodium carbonate), and filtered.
<b>12.9.2.3</b>	<b>Other soybean sauces, excluding products of food categories 12.9.2.1 and 12.9.2.2</b>
	Non-emulsified sauce made from fermented soybean sauce and/or non-fermented soybean sauce, with or without sugar, with or without caramelization process.
<b>12.10</b>	<b>Protein products other than from soybeans</b>
	Protein products other than from soybeans. Excluding milk protein includes casein and caseinates in food category 01.5.1
<b>13.0</b>	<b>Foodstuffs intended for particular nutritional uses</b>
	Foods for special dietary use are specially processed or formulated to satisfy particular dietary requirements that exist because of a particular physical or physiological condition and/or specific disease and disorder. The composition of these foods must differ significantly from the composition of ordinary foods of comparable nature, if such foods exist. Dietetic foods other than those in 13.0 are included in the categories for their standard counterparts.

<b>13.1</b>	<b>Infant formulae, follow-on formulae, and formulae for special medical purposes for infants</b>
	Foods that are intended for infants and for young children as defined in the sub-categories 13.1.1, 13.1.2, and 13.1.3.
<b>13.1.1</b>	<b>Infant formulae</b>
	A human milk substitute for infants (aged no more than 12 months) that is specifically formulated to provide the sole source of nutrition during the first months of life up to the introduction of appropriate complementary feeding. Product is in a liquid form, either as a ready-to-eat product, or is reconstituted from a powder. Products may be, hydrolyzed protein and/or amino acid-based, or milk-based. Excluding formulae for special medical purposes for infants under food category 13.1.3.
<b>13.1.2</b>	<b>Follow-up formulae</b>
	Food intended for use as a liquid part of the complementary feeding of infants (aged at least 6 months) and for young children (aged 1-3 years). <sup>75</sup> They may be ready-to-eat or in a powdered form to be reconstituted with water. Products may be soy based hydrolyzed protein and/or amino acid-based, or milk-based. Excluding formulae for special medical purposes for infants under food category 13.1.3.
<b>13.1.3</b>	<b>Formulae for special medical purposes for infants</b>
	Foods for special dietary use that are specially processed or formulated and presented for the dietary management of infants and may be used only under medical supervision. They are intended for the exclusive or partial feeding of infants with limited or impaired capacity to take, digest, absorb or metabolize ordinary infant formulae or certain nutrients contained therein, or who have other special medically determined nutrient requirement, whose dietary management cannot be achieved only by modification of the normal diet, by other foods for special dietary uses, or by a combination of the two.
<b>13.2</b>	<b>Complementary foods for infants and young children</b>
	Foods that are intended for infants 6 months of age and older, and for progressive adaptation of infants and children to ordinary food. Products may be ready-to-eat or in powder form to be reconstituted with water, milk, or other suitable liquid. Excluding infant formulae (13.1.1), follow-up formulae (13.1.2), and formulae for special medical purposes (13.1.3).
<b>13.3</b>	<b>Dietetic foods intended for special medical purposes</b>
	Foods for special dietary use that are specially processed or formulated and presented for the dietary management of patients and may be used only under medical supervision. They are intended for the exclusive or partial feeding of patients with limited or impaired capacity to take, digest, absorb or metabolize



	ordinary foods or certain nutrients contained therein, or who have other special medically-determined nutrient requirement, whose dietary management cannot be achieved only by modification of the normal diet, by other foods for special dietary uses, or by a combination of the two. Excluding products of food category 13.1.
<b>13.4</b>	<b>Dietetic formulae for slimming purposes and weight reduction</b>
	Formula foods that when presented as “ready-to-eat” or when prepared in conformity with the directions for use are specifically presented as replacements for all or part of the total daily diet. Includes products with reduced caloric content such as those that are low in sugar and/or fat, sugar- or fat-free, or contain sugar and/or fat-substitutes.
<b>13.5</b>	<b>Dietetic foods</b>
	Products of high nutritional content, in liquid or solid form, to be used by individuals as part of a balanced diet to provide supplemental nutrition. Products are not intended to be used for purposes of weight loss or as part of a medical regimen. Excluding products of food category 13.1-13.4 and 13.6.
<b>13.6</b>	<b>Food supplements</b>
	Products taken for consume other than conventional foods for benefit of health promotion which contain nutrients or other substances as ingredients in forms of tablets, capsules, powders, flakes, liquids or others at safe limits for long-term consumption.
<b>14.0</b>	<b>Beverages</b>
	This major category is divided into the broad categories of non-alcoholic (14.1) and alcoholic (14.2) beverages. Excluding dairy-based beverages in 01.1.4.
<b>14.1</b>	<b>Non-alcoholic beverages</b>
	This broad category includes waters and carbonated waters (14.1.1), fruit and vegetable juices (14.1.2), fruit and vegetable nectars (14.1.3), water-based flavoured carbonated and non-carbonated drinks (14.1.4), and water-based brewed or steeped beverages such as coffee and tea (14.1.5). Natural alcoholic content from ingredients or alcohol used in production process, the total quantity of alcohol shall be not more than 0.5% by weight.
<b>14.1.1</b>	<b>Waters</b>
	Includes natural waters (14.1.1.1) and other bottled waters (14.1.1.2), each of which may be non-carbonated or carbonated.
<b>14.1.1.1</b>	<b>Natural mineral waters and source waters</b>
	Waters obtained directly at the source and packaged close to the source; are characterized by the presence of certain mineral salts in relative proportions and trace elements or other constituents. Natural mineral water may be naturally carbonated (with carbon dioxide from the source), carbonated (with

	added carbon dioxide of another origin), decarbonated (with less carbon dioxide than present in the water at the source so it does not spontaneously give off carbon dioxide under conditions of standard temperature and pressure), or fortified (with carbon dioxide from the source), and non-carbonated (contains no free carbon dioxide).
<b>14.1.1.2</b>	<b>Table waters and soda waters</b>
	Includes waters other than natural source waters that may be carbonated by addition of carbon dioxide or oxygen and may be processed by filtration, disinfection, or other suitable means. These waters may contain added mineral salts. Excluding carbonated and non-carbonated waters containing flavours are found in category 14.1.4.
<b>14.1.2</b>	<b>Fruit and vegetable juices</b>
	This category applies only to fruit and vegetable juices. Fruit-vegetable juice blends have separate classifications for each component (14.1.2.1) and vegetable juice (14.1.2.3). Excluding beverages based on fruit and vegetable juices are found in food category 14.1.4.
<b>14.1.2.1</b>	<b>Fruit juice</b>
	<p>Fruit juice is the unfermented but fermentable liquid obtained from the edible part of sound, appropriately mature and fresh fruit or of fruit maintained in sound condition by suitable means. The juice is prepared by suitable processes, which maintain the essential physical, chemical, organoleptical and nutritional characteristics of the juices of the fruit from which it comes. The juice may be cloudy or clear, and may have restored (to the normal level attained in the same kind of fruit) aromatic substances and volatile flavour components, all of which must be obtained by suitable physical means, and all of which must have been recovered from the same kind of fruit. Pulp and cells obtained by suitable physical means from the same kind of fruit may be added. This can be classified to three types as follows;</p> <ol style="list-style-type: none"> <li>1. Fruit juice directly expressed by mechanical extraction processes such as pressing or squeezing etc.;</li> <li>2. Reconstituted Fruit juice by reconstituting concentrated fruit juice with potable water as its quality and standard is met with Notification of Ministry of Public Health regarding drinking water in sealed container. The reconstituted fruit juice should have the brix level to a value not less than the brix value established as specified in the Annex of Codex General Standard for Fruit Juices and Nectars (CODEX STAN 247-2005) or requirements of Thai FDA.</li> </ol> <p>If there is no Brix level specified in the Annex, minimum Brix shall be calculated on the basis of the soluble solids content of the single strength juice used to produce such concentrated juice.</p>

	<p>3. Fruit juices obtained by diffusion with water of (1) whole fruit whose juice cannot be extracted by any physical means, or (2) dehydrated whole fruit. Such products may be concentrated and reconstituted. The solids content of the finished product shall meet the minimum brix level for reconstituted juice specified in the Annex of Codex General Standard for Fruit Juices and Nectars (CODEX STAN 247-2005) or requirements of Thai FDA.</p>
<b>14.1.2.2</b>	<b>Vegetable juice</b>
	<p>Vegetable juice is the liquid unfermented but fermentable product intended for direct consumption obtained by mechanical expression, crushing, grinding, and/or sieving of one or more sound fresh vegetables or vegetables preserved exclusively by physical means. The juice may be clear, turbid, or pulpy. It may have been concentrated and reconstituted with water. Products may be based on a single vegetable or blends of vegetables. This can be classified to two types as follows;</p> <ol style="list-style-type: none"> <li>1. Vegetable juice directly expressed by mechanical extraction processes such as pressing or squeezing etc.</li> <li>2. Reconstituted Vegetable juice by reconstituting concentrated vegetable juice with potable water as its quality and standard is met with Notification of Ministry of Public Health regarding drinking water in sealed container.</li> </ol>
<b>14.1.2.3</b>	<b>Concentrates for fruit juice</b>
	<p>Concentrated fruit juice is the product that complies with the definition given in food category 14.1.2.1. It is prepared by the physical removal of water from fruit juice in an amount to increase the Brix level to a value at least 50% greater than that established for reconstituted juice from the same fruit. In the production of juice that is to be concentrated, suitable processes are used, and may be combined, with simultaneous diffusion of the pulp cells or fruit pulp by water, provided that the water-extracted soluble fruit solids are added in-line to the primary juice, before the concentration procedure. Fruit juice concentrates may have restored (to the normal level attained in the same kind of fruit) aromatic substances and volatile flavour components, all of which must be obtained by suitable physical means, and all of which must be recovered from the same kind of fruit. Pulp and cells obtained by suitable physical means from the same kind of fruit may be added. Sold in liquid, syrup and frozen forms for the preparation of a ready-to-drink juice by addition of water.</p>
<b>14.1.2.4</b>	<b>Concentrates for vegetable juice</b>
	<p>Prepared by the physical removal of water from vegetable juice. Sold in liquid, syrup and frozen forms for the preparation of a ready-to-drink juice by addition of water. Includes carrot juice concentrate.</p>

<b>14.1.3</b>	<b>Fruit and vegetable nectars</b>
	Fruit and vegetable nectars are beverages produced from purees, juices, or concentrates of either, blended with water and sugar, honey, syrups, and/or sweeteners. Fruit-vegetable nectar blends are reported under their components (i.e. fruit nectar (14.1.3.1) and vegetable nectar (14.1.3.2)).
<b>14.1.3.1</b>	<b>Fruit nectar</b>
	Fruit nectar is the unfermented but fermentable product obtained by adding water with or without the addition of sugar, honey, syrups, and/or sweeteners to fruit juice, concentrated fruit juice, fruit purees or concentrated fruit purees, or a mixture of those products. Aromatic substances, volatile flavour components, pulp and cells, all of which must have been recovered from the same kind of fruit and obtained by suitable physical means, may be added. Products may be based on a single fruit or on fruit blends. However, minimum juice and/or purée content (% v/v) for fruit nectars should be met requirements specified in Annex of Codex General Standard for Fruit Juices and Nectars (CODEX STAN 247-2005) or requirements of Thai FDA.
<b>14.1.3.2</b>	<b>Vegetable nectar</b>
	Product obtained by adding water with or without the addition of sugar, honey, syrups, and/or sweeteners to vegetable juice (14.1.2.2) or concentrated vegetable juice (14.1.2.4), or a mixture of those products. Products may be based on a single vegetable or on a blend of vegetables.
<b>14.1.3.3</b>	<b>Concentrates for fruit nectar</b>
	Prepared by the physical removal of water from fruit nectar (14.1.3.1) or its starting materials. Sold in liquid, syrup and frozen forms for the preparation of ready-to-drink nectar by addition of water.
<b>14.1.3.4</b>	<b>Concentrates for vegetable nectar</b>
	Prepared by the physical removal of water from vegetable nectar (14.1.3.2). Sold in liquid, syrup and frozen forms for the preparation of ready-to-drink nectars by addition of water.
<b>14.1.4</b>	<b>Water-based flavoured drinks</b>
	Includes all carbonated and non-carbonated varieties and concentrates. Includes products based on fruit and vegetable juices. Also, includes sport-, energy-, electrolyte-, particulated-, coffee-, tea- and herbal-based drinks.
<b>14.1.4.1</b>	<b>Carbonated water-based flavoured drinks</b>
	Includes water-based flavoured drinks with added carbon dioxide with nutritive, non-nutritive and/or intense sweeteners and other permitted food additives. Includes diet/light and regular type's products. These beverages may be clear, cloudy, or may contain particulated matter (e.g. fruit pieces), nutrients and other ingredients.

<b>14.1.4.2</b>	<b>Non-carbonated water-based flavoured drinks</b>
	Include water-based flavoured drinks without added carbon dioxide with nutritive, non-nutritive and/or intense sweeteners and other permitted food additives. Includes diet/light and regular type's products. These beverages may be clear, cloudy, or may contain particulated matter (e.g. fruit pieces), nutrients and other ingredients.
<b>14.1.4.3</b>	<b>Concentrates (liquid or solid form) for water-based flavoured drinks</b>
	Include powder, syrup, liquid and frozen concentrates for the preparation of carbonated (14.1.4.1) or non-carbonated (14.1.4.2) water-based non-alcoholic beverages by addition of water or carbonated water. This includes water-based fruit drinks which contain other ingredients rather than sweeteners such as sugar honey syrup or intense sweeteners while, flavoring agents may be added.
<b>14.1.5</b>	<b>Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa</b>
	Includes the ready-to-drink products, and their mixes and concentrates. Treated coffee beans for the manufacture of coffee products and herbal infusions are also included. Excluding ready-to-drink cocoa is included in category 01.1.4, and cocoa mixes in 05.1.1.
<b>14.2</b>	<b>Alcoholic beverages</b>
	The alcohol-free and low-alcoholic counterparts are included in the same category as the alcoholic beverage.
<b>14.2.1</b>	<b>Beer and malt beverages</b>
	Alcoholic beverages brewed from germinated barley (malt), hops, yeast, and water.
<b>14.2.2</b>	<b>Cider and perry</b>
	Fruit wines made from apples (cider) and pears (perry). Include carbonated cider and perry.
<b>14.2.3</b>	<b>Grape wines</b>
	Alcoholic beverage obtained exclusively from the partial or complete alcoholic fermentation of fresh grapes, whether crushed or not, or of grape must (juice).
<b>14.2.3.1</b>	<b>Still grape wine</b>
	Grape wine (white, red, rosé, or blush, dry or sweet) that may contain up to a maximum 0.4g/100 ml (4000 mg/kg) carbon dioxide at 20 °C.
<b>14.2.3.2</b>	<b>Sparkling and semi-sparkling grape wines</b>
	Grape wines in which carbonation is produced during the fermentation process, either by bottle fermentation or closed tank fermentation. Also includes carbonated wine whose carbon dioxide is partially or totally of exogenous origin.

<b>14.2.3.3</b>	<b>Fortified grape wine, grape liquor wine, and sweet grape wine</b>
	Grape wines produced either by: (i) the fermentation of grape must (juice) of high sugar concentration; or (ii) by the blending of concentrated grape juice with wine; or (iii) the mixture of fermented must with alcohol.
<b>14.2.4</b>	<b>Wines other than grape</b>
	Includes wines made from fruit other than grapes, apples and pears. These wines may be still or sparkling.
<b>14.2.5</b>	<b>Mead</b>
	Alcoholic liquor made from fermented honey, malt and spices, or just of honey.
<b>14.2.6</b>	<b>Distilled spirituous beverages containing more than 15% alcohol</b>
	Includes all distilled spirituous beverages derived from grain (e.g. corn, barley, rye, wheat), tubers (e.g. potato), fruit (e.g. grapes, berries) or sugar cane that contain greater than 15% alcohol.
<b>14.2.7</b>	<b>Aromatized alcoholic beverages</b>
	Includes all non-standardized alcoholic beverage products. Although most of these products contain less than 15% alcohol, some traditional non-standardized aromatized products may contain up to 24% alcohol.
<b>15.0</b>	<b>Ready-to-eat savouries</b>
	Prepackaged ready-to-eat savouries for munchies between main meals and to be consumed less than main meals. This contains potato, cereal, flour or starch (from tuber or root part) or nuts and seeds or fish as main ingredients. Then, this product is produced by baking, frying or extrusion and may be either added with flavouring agents or not. Includes all types of savoury snack foods. However, this excludes bakery wares specified in Category 07.0, or Meat and meat products specified in Category 08.0, or fish and fish products specified in Category 09.0
<b>15.1</b>	<b>Snacks - potato, cereal, flour or starch based</b>
	Includes all savoury snacks, with or without added flavourings.
<b>15.2</b>	<b>Snacks - Processed nut or flavoured processed seed based</b>
	Includes all types of whole nuts processed by, e.g. dry-roasting, roasting, marinating or boiling, either in-shell or shelled, salted or unsalted. Yoghurt-, cereal-, and honey-covered nuts, and dried fruit-nut-and-cereal snacks are classified here. Excluding chocolate-covered nuts are classified in 05.1.4, and nuts covered in imitation chocolate are included in 05.1.5.
<b>15.3</b>	<b>Snacks - fish based</b>
	This describes savoury crackers with fish, fish products or fish flavouring. Excluding dried fish <i>per se</i> that may be consumed as a snack is assigned to food category 09.2.5, and dried meat snacks (e.g. beef jerky, pemmican) are assigned to food category 08.3.1.2.

16.0	Prepared foods
	<p>These foods are not included in the other food categories (01-15) and should be considered on a case-by-case basis. Prepared foods are mixtures of multiple components (e.g. meat, sauce, grain, cheese, vegetables); the components are included in other food categories. Prepared foods require minimal preparation by the consumer (e.g. heating, thawing, rehydrating).</p>

Unofficial Translation

**PART 2: Descriptors for each Note.**

Notes	Descriptors
1	As adipic acid.
2	On the dry ingredient, dry weight, dry mix or concentrate basis.
3	For use in surface treatment only.
4	For use in decoration, stamping, marking or branding the product only.
5	Excluding products conforming to the Standard for Jams, Jellies and Marmalades (CODEX STAN 296-2009).
6	As aluminium.
7	For use in coffee substitutes only.
8	As bixin.
9	Except for use in ready-to-drink coffee products at 10,000 mg/kg.
10	As ascorbyl stearate.
11	On the flour basis.
12	As a result of carryover from flavouring substances.
13	As benzoic acid.
14	For use in hydrolyzed protein liquid formula only.
15	On the fat or oil basis.
16	For use in glaze, coatings or decorations for fruit, vegetables, meat or fish only.
17	As cyclamic acid.
18	As added level; residue not detected in ready-to-eat food.
19	For use in products conforming to the Standard for Quick Frozen Shrimps and Prawns (CODEX STAN 92-1981) and the Standard for Quick Frozen Lobsters (CODEX STAN 95-1981): sulfur dioxide (INS 220), sodium sulfite (INS 221), sodium hydrogen sulfite (INS 222), sodium metabisulfite (INS 223), Potassium metabisulfite (INS 224), potassium sulfite (INS 225) as preservatives at 100 mg/kg in the edible part of the raw product, or 30 mg/kg in the edible part of the cooked product.
20	Singly or in combination with other stabilizers, thickeners and/or gums.
21	As anhydrous calcium disodium ethylenediaminetetraacetate.
22	For use in smoked fish paste only.
23	As iron.
24	As anhydrous sodium ferrocyanide.
25	For use at GMP in full fat soy flour only.
26	As steviol equivalents.



Notes	Descriptors
27	As para-hydroxybenzoic acid.
28	Except for use in wheat flour conforming to the standard for Wheat Flour (CODEX STAN 152-1985) at 2,000 mg/kg.
29	For non-standardized food only.
30	As residual NO <sub>3</sub> ion.
31	On the mash used basis.
32	As residual NO <sub>2</sub> ion.
33	As phosphorus.
34	On the anhydrous basis.
35	For use in cloudy juices only.
36	On the residual level basis.
37	Except for products conforming to the Standard for Chocolate and Chocolate Products (CODEX STAN 87-1981) at 2,000 mg/kg.
38	On the creaming mixture basis.
39	On a total carotenoid basis.
40	Pentasodium triphosphate (INS 451(i)) only, to enhance the effectiveness of benzoates and sorbates.
41	For use in breading or batter coatings only.
42	As sorbic acid.
43	As tin.
44	As residual SO <sub>2</sub> .
45	As tartaric acid.
46	As thiodipropionic acid.
47	On the dry egg yolk weight basis.
48	For use in olives only.
49	For use on citrus fruits only.
50	For use in fish roe only.
51	For use in herbs only.
52	Excluding chocolate milk.
53	For use in coatings only.
54	For use in cocktail cherries and candied cherries only.
55	Within the limits for sodium, calcium, and potassium specified in the Standard for Infant Formula and Formula for Special Dietary Purposes Intended for Infants (CODEX STAN 72-1981): singly or in combination with other sodium, calcium, and/or potassium salts.

Notes	Descriptors
56	Excluding products where starch is present.
57	GMP is 1 part benzoyl peroxide and not more than 6 parts of the subject additive by weight.
58	As calcium.
59	For use as a packaging gas only.
60	The CO <sub>2</sub> content in finished still wine shall not exceed 4,000 mg/kg at 20°C.
61	For use in minced fish only.
62	As copper.
63	For non-standardized food and for breaded or batter coatings in food conforming to the Standard for Quick Frozen Fish Sticks (Fish Fingers), Fish Portions and Fish Fillets - Breaded or in Batter (CODEX STAN 166-1989).
64	For use in dry beans only.
65	As a result of carryover from nutrient preparations.
66	As formaldehyde.
67	Except for use in liquid egg whites at 8,800 mg/kg as phosphorus, and in liquid whole eggs at 14,700 mg/kg as phosphorus.
68	For use in products with no added sugar only.
69	For use as a carbonating agent only.
70	As the acid.
71	Calcium, potassium and sodium salts only.
72	On the ready-to-eat basis.
73	Excluding whole fish.
74	Excluding liquid whey and whey products used as ingredients in infant formula.
75	For use in milk powder for vending machines only.
76	For use in potatoes only.
77	For special nutritional uses only.
78	Except for use in pickling and balsamic vinegars at 50,000 mg/kg.
79	For use on nuts only.
80	Equivalent to 2 mg/dm <sup>2</sup> surface application to a maximum depth of 5 mm.
81	Equivalent to 1 mg/dm <sup>2</sup> surface application to a maximum depth of 5 mm.
82	Except for use in shrimp ( <i>Crangon crangon</i> and <i>Crangon vulgaris</i> ) at 6,000 mg/kg.
83	L(+)-form only.
84	For use in products for infants over 1 year of age only.

Notes	Descriptors
85	Use level in sausage casings; residue in sausage prepared with such casings should not exceed 100 mg/kg.
86	For use in whipped dessert toppings other than cream only.
87	On the treatment level basis.
88	As a result of carryover from the ingredient.
89	For use in sandwich spreads only.
90	For use in milk-sucrose mixtures used in the finished product only.
91	Singly or in combination: Benzoates and sorbates.
92	Excluding tomato-based sauces.
93	Excluding natural wine produced from <i>Vitis vinifera</i> grapes.
94	For use in loganiza (fresh, uncured sausage) only.
95	For non-standardized foods: for use in surimi and fish roe products only.
96	On the dried weight basis of the high intensity sweetener.
97	On the final cocoa and chocolate product basis.
98	For use in dust control only.
99	For use in products conforming to the Standard for Bouillons and Consommés (CODEX STAN 117-1981) only.
100	For use in crystalline products and sugar toppings only.
101	When used in combination as emulsifiers: ammonium salts of phosphatidic acid (INS 442), polyglycerol esters of interesterified ricinoleic acid (INS 476), sorbitan monostearate (INS 491), sorbitan tristearate (INS 492), and polysorbates (polyoxyethylene (20) sorbitan monolaurate (INS 432), polyoxyethylene (20) sorbitan monooleate (INS 433), polyoxyethylene (20) sorbitan monostearate (INS 435) and polyoxyethylene (20) sorbitan tristearate (INS 436)), the total combined use level shall not exceed 15,000 mg/kg.
102	For use in fat emulsions for baking purposes only.
103	Except for use in special white wines at 400 mg/kg.
104	Except for use in bread and yeast-leavened bakery products: maximum 5,000 mg/kg residue.
105	Except for use in dried gourd strips (Kampyo) at 5,000 mg/kg.
106	Except for use in Dijon mustard at 500 mg/kg.
107	Except for use of sodium ferrocyanide (INS 535) and potassium ferrocyanide (INS 536) in food-grade dendritic salt at 29 mg/kg as anhydrous sodium ferrocyanide.
108	For use on coffee beans only.

Notes	Descriptors
109	Use level reported as $25 \text{ lbs}/1000 \text{ gal} \times (0.45 \text{ kg}/\text{lb}) \times (1 \text{ gal}/3.75 \text{ L}) \times (1 \text{ L}/\text{kg}) \times (10^6 \text{ mg}/\text{kg}) = 3,000 \text{ mg}/\text{kg}$
110	For use in frozen French fried potatoes only.
111	Except for use in dried glucose syrup used in the manufacture of sugar confectionery at 150 mg/kg and glucose syrup used in the manufacture of sugar confectionery at 400 mg/kg.
112	For use in grated cheese only.
113	As acesulfame potassium equivalents (the reported maximum level can be converted to an aspartame-acesulfame salt basis by dividing by 0.44). Combined use of aspartame-acesulfame salt with individual acesulfame potassium or aspartame should not exceed the individual maximum levels for acesulfame potassium or aspartame (the reported maximum level can be converted to aspartame equivalents by dividing by 0.68).
114	Except for use in microsweets and breath freshening mints at 100 mg/kg.
115	For use in pineapple juice only.
116	For use in doughs only.
117	Except for use in loganiza (fresh, uncured sausage) at 1,000 mg/kg.
118	Except for use in tocino (fresh, cured sausage) at 1,000 mg/kg.
119	As aspartame equivalents (the reported maximum level can be converted to an aspartame-acesulfame salt basis by dividing by 0.64). Combined use of aspartame-acesulfame salt with individual aspartame or acesulfame potassium should not exceed the individual maximum levels for aspartame or acesulfame potassium (the reported maximum level can be converted to acesulfame potassium equivalents by multiplying by 0.68).
120	Except for use in caviar at 2,500 mg/kg.
121	Except for use in fermented fish products at 1,000 mg/kg.
122	Subject to national legislation of the importing country.
123	For use of sorbitan monostearate (INS 491), sorbitan tristearate (INS 492), sorbitan monolaurate (INS 493), sorbitan monooleate (INS 494), and sorbitan monopalmitate (INS 495) in combination up to a maximum level of 2000 mg/kg on the final cocoa and chocolate basis as emulsifiers in products conforming to the Standard for Cocoa Powders (Cocoas) and Dry Mixtures of Cocoa and Sugars (CODEX STAN 105-1981).
124	For use in products containing less than 7% ethanol only.
125	For use in a mixture with vegetable oil only, as a release agent for baking pans.
126	For use in releasing dough in dividing or baking only.

Notes	Descriptors
127	On the served to the consumer basis.
128	Tartaric acid (INS 334) only.
129	For use as an acidity regulator in grape juice only.
130	Singly or in combination: butylated hydroxyanisole (INS 320), butylated hydroxytoluene (INS 321), tertiary butylated hydroquinone (INS 319), and propyl gallate (INS 310).
131	For use as a flavour carrier only.
132	Except for use in semi-frozen beverages at 130 mg/kg on a dried basis.
133	Any combination of butylated hydroxyanisole (INS 320), butylated hydroxytoluene (INS 321), and propyl gallate (INS 310) at 200 mg/kg, provided that single use limits are not exceeded.
134	Except for use in cereal-based puddings at 500 mg/kg.
135	Except for use in dried apricots at 2,000 mg/kg, bleached raisins at 1,500 mg/kg, desiccated coconut at 200 mg/kg and coconut from which oil has been partially extracted at 50 mg/kg.
136	For use to prevent browning of certain light coloured vegetables only.
137	Except for use in frozen avocado at 300 mg/kg.
138	For use in energy-reduced products only.
139	For use in mollusks, crustaceans, and echinoderms only.
140	Except for use in canned abalone (PAUA) at 1,000 mg/kg.
141	For use in non-flavoured mineral fortified fluid milks only.
142	Excluding coffee and tea.
143	For use in fruit juice-based drinks and dry ginger ale only.
144	For use in sweet and sour products only.
145	For use in energy reduced or no added sugar products only.
146	<i>Beta</i> -carotene (synthetic) (INS 160a(i)) only.
147	Excluding whey powders for infant food.
148	Except for use in microsweets and breath freshening mints at 10,000 mg/kg.
149	Except for use in fish roe at 100 mg/kg.
150	For use in soy-based formula only.
151	Except for use in hydrolyzed protein and/or amino acid-based formula at 1,000 mg/kg.
152	For use in frying only.
153	For use in instant noodles only.
154	For use in coconut milk only.

Notes	Descriptors
155	For use in frozen, sliced apples only.
156	Except for use in microsweets and breath freshening mints at 2,500 mg/kg.
157	Except for use in microsweets and breath freshening mints at 2,000 mg/kg.
158	Except for use in microsweets and breath freshening mints at 1,000 mg/kg.
159	For use in pancake syrup and maple syrup only.
160	For use in ready-to-drink products and pre-mixes for ready-to-drink products only.
161	Subject to national legislation of the importing country aimed, in particular, at consistency with Section 3.2 of the Preamble.
162	For use in dehydrated products and salami-type products only.
163	Except for use in microsweets and breath freshening mints at 3,000 mg/kg.
164	Except for use in microsweets and breath freshening mints at 30,000 mg/kg.
165	For use in products for special nutritional use only.
166	For use in milk-based sandwich spreads only.
167	For use in dehydrated products only.
168	Singly or in combination: d-alpha-tocopherol (INS 307a), tocopherol concentrate, mixed (INS 307b) and dl-alpha-tocopherol (INS 307c).
169	For use in fat-based sandwich spreads only.
170	Excluding products conforming to the Standard for Fermented Milks (CODEX STAN 243-2003).
171	Excluding anhydrous milkfat.
172	Except for use in fruit sauces, fruit toppings, coconut cream, coconut milk and "fruit bars" at 50 mg/kg.
173	Excluding instant noodles containing vegetables and eggs.
174	Singly or in combination: sodium aluminosilicate (INS 554), calcium aluminium silicate (INS 556), and aluminium silicate (INS 559).
175	Except for use in jelly-type fruit-based desserts at 200 mg/kg.
176	For use in canned liquid coffee only.
177	For non-standardized food and for minced fish flesh and breaded or batter coatings conforming to the Standard for Quick Frozen Fish Sticks (Fish Fingers), Fish Portions and Fish Fillets -Breaded or in Batter (CODEX STAN 166-1989).
178	As carminic acid.
179	For use in restoring the natural colour lost in processing only.
180	Singly or in combination: butylated hydroxyanisole (BHA, INS 320) and butylated hydroxytoluene (BHT, INS 321).

Notes	Descriptors
181	As anthocyanin.
182	Excluding coconut milk.
183	For use in surface decoration only.
184	For use in nutrient coated rice grain premixes only.
185	As norbixin.
186	For use in flours with additives only.
187	Ascorbyl palmitate (INS 304) only.
188	If used in combination with aspartame-acesulfame salt (INS 962), the combined maximum use level, expressed as acesulfame potassium, should not exceed this level.
189	Excluding rolled oats.
190	Except for use in fermented milk drinks at 500 mg/kg.
191	If used in combination with aspartame-acesulfame salt (INS 962), the combined maximum use level, expressed as aspartame, should not exceed this level.
192	For use in liquid products only.
193	For use in crustacean and fish pastes only.
194	For use in instant noodles conforming to the Standard for Instant Noodles (CODEX STAN 249-2006) only.
195	Singly or in combination: butylated hydroxyanisole (BHA, INS 320), butylated hydroxytoluene (BHT, INS 321) and tertiary butylhydroquinone (TBHQ, INS 319).
196	Singly or in combination: butylated hydroxyanisole (BHA, INS 320), butylated hydroxytoluene (BHT, INS 321) and propyl gallate (INS 310).
197	Singly or in combination: butylated hydroxytoluene (BHT, INS 321) and propyl gallate (INS 310).
198	For use in solid products (e.g., energy, meal replacement or fortified bars) only.
199	Except for use in microsweets and breath freshening mints at 6,000 mg/kg as steviol equivalents.
200	Except for use in Japanese style 'lachs ham' of pork loin (cured and non-heat treated) at 120 mg/kg as steviol equivalents
201	For use in flavoured products only.
202	For use in brine used in the production of sausage only.
203	For use in chewable supplements only.
204	Except for use in longan and lichee at 50 mg/kg.
205	Except for use to prevent browning of certain light colored vegetables at 50 mg/kg.

Notes	Descriptors
206	Except for use as a bleaching agent in products conforming to the Standard for Aqueous Coconut Products (CODEX STAN 240-2003) at 30 mg/kg.
207	Except for use in soybean sauce intended for further processing at 50,000 mg/kg.
208	For use in dried and dehydrated products only.
209	Excluding products conforming to the Standard for Blend of Skimmed Milk and Vegetable Fat in Powdered Form (CODEX STAN 251-2006).
210	For non-standardized food and for use as a humectant in products conforming to the Standard for Quick Frozen Fish Sticks (Fish Fingers), Fish Portions and Fish Fillets -Breaded or in Batter (CODEX STAN 166-1989); and for use as a thickener in breading or batter coatings for products conforming to the Standard for Quick Frozen Fish Sticks (Fish Fingers), Fish Portions and Fish Fillets - Breaded or in Batter (CODEX STAN 166-1989).
211	For use in noodles only.
212	Except for use in products conforming to the Standard for Bouillon and Consommés (CODEX STAN 117-1981) at 3,000 mg/kg.
213	For use in liquid products containing high intensity sweeteners only.
214	Excluding products conforming to the Standard for Dairy Fat Spreads (CODEX STAN 253-2006).
215	Excluding products conforming to the Standard for Fat Spreads and Blended Spreads (CODEX STAN 256-2007).
216	For use in maize-based products only.
217	Except for use in toppings at 300 mg/kg.
218	Only sulfites can be used as preservatives and antioxidants in the products covered by the Standard for Desiccated Coconut (CODEX STAN 177-1991).
219	Except for use in non-alcoholic aniseed-based, coconut-based, and almond-based drinks at 5,000 mg/kg.
220	For use in flavoured products heat treated after fermentation only.
221	For use in potato dough and pre-fried potato slices only.
222	For use in collagen-based casings with a water activity greater than 0.6 only.
223	Except for use in products containing added fruits, vegetables, or meats at 3,000 mg/kg.
224	Excluding aromatized beer.
225	Except for use in self-raising flour at 12,000 mg/kg.
226	Except for use as a meat tenderizer at 35,000 mg/kg.
227	For use in sterilized and UHT treated milks only.



Notes	Descriptors
228	Except for use to stabilize higher protein liquid whey used for further processing into whey protein concentrates at 1,320 mg/kg.
229	For use as a flour treatment agent, raising agent or leavening agent only.
230	For use as an acidity regulator only.
231	For use in flavoured fermented milks and flavoured fermented milks heat treated after fermentation only.
232	For use in vegetable fats conforming to the Standard for Edible Fats and Oils Not Covered by Individual Standards (CODEX STAN 19-1981) only.
233	As nisin.
234	For use as a stabilizer or thickener only.
235	For use in reconstituted and recombined products only.
236	Excluding products conforming to the Standard for Cream and Prepared Creams (reconstituted cream, recombined cream, prepackaged liquid cream) (CODEX STAN 288-1976).
237	Excluding products conforming to the Standard for Processed Cereal-Based Foods for Infants and Young Children (CODEX STAN 74-1981).
238	Except for use in products corresponding to the Standard for Processed Cereal-Based Foods for Infants and Young Children (CODEX STAN 74-1981) at GMP.
239	Excluding products conforming to the Standard for Canned Baby Foods (CODEX STAN 73-1981).
240	The use level is within the limit for sodium listed in the Standard for Canned Baby Foods (CODEX STAN 73-1981).
241	For use in surimi products only.
242	For use as an antioxidant only.
243	For use in products conforming to the Standard for Processed Cereal-based Foods for Infants and Young Children (CODEX STAN 74-1981) only, as a raising agent.
244	For use in biscuit dough only.
245	For use in pickled vegetables only.
246	Singly or in combination: aluminium ammonium sulfate (INS 523) and sodium aluminium phosphates (acidic and basic; (INS 541(i),(ii)).
247	For use in kuzukiri and harusame only.
248	For use as a raising agent only.
249	For use as a raising agent in mixes for steamed breads and buns only.
250	For use in boiled mollusks and tsukudani only.
251	For use in processed American cheese only.

Notes	Descriptors
252	For use in self-rising flour and self-rising corn meal only.
253	For non-standardized foods and for use in minced fish flesh only in products conforming to the Standard for Quick Frozen Fish Sticks (Fish Fingers), Fish Portions and Fish Fillets - Breaded or in Batter (CODEX STAN 166-1989).
254	For use in salt applied to dry salted cheeses during manufacturing only.
255	Except for use in seasonings applied to foods in food category 15.1 at 1,700 mg/kg.
256	For use in noodles, gluten-free pasta and pasta intended for hypoproteic diets only.
257	Except for use in breading or batter coatings in products conforming to the Standard for Quick Frozen Fish Sticks (Fish Fingers), Fish Portions and Fish Fillets – Breaded or in Batter (CODEX STAN 166-1989) only at 25 mg/kg as bixin.
258	Excluding maple syrup.
259	Singly or in combination: sodium aluminosilicate (INS 554) and calcium aluminium silicate (INS 556).
260	For use in powdered beverage whiteners only.
261	For use in heat-treated buttermilk only.
262	For use in edible fungi and fungus products only.
263	Except for use in pickled fungi at 20,000 mg/kg.
264	Except for use in sterilized fungi at 5,000 mg/kg: citric acid (INS 330) and lactic acid (INS 270), singly or in combination.
265	For use in quick frozen French fried potatoes only, as a sequestrant.
266	Excluding salted Atlantic herring and sprat.
267	Excluding products conforming to the Standard for Salted Fish and Dried Salted Fish of the Gadidae Family of Fishes (CODEX STAN 167-1989), the Standard for Dried Shark Fins (CODEX STAN 189-1993), the Standard for Crackers from Marine and Freshwater Fish, Crustaceans and Molluscan Shellfish (CODEX STAN 222-2001), and the Standard for Boiled Dried Salted Anchovies (CODEX STAN 236-2003), and smoked dried fish conforming to standard for Smoked Fish, Smoked flavoured Fish and Smoked-dried Fish (CODEX STAN 311-2013).
268	Singly or in combination: INS 471, 472a, 472b and 472c in products conforming to the Standard for Processed Cereal-Based Foods for Infants and Young Children (CODEX STAN 74-1981).
269	Singly or in combination with other modified starches used as thickeners in products conforming to the Standard for Processed Cereal-Based Foods for Infants and Young Children (CODEX STAN 74-1981).
270	For use at 60,000 mg/kg, singly or in combination with other starch thickeners In products conforming to the Standard for Canned Baby Foods (CODEX STAN 73-1981).

Notes	Descriptors
271	For use in products conforming to the Standard for Canned Baby Foods (CODEX STAN 73-1981).
272	Singly or in combination: INS 410, 412, 414, 415 and 440 at 20,000 mg/kg in glutenfree cereal based foods, and 10 000 mg/kg in other products conforming to the Standard for Processed Cereal-Based Foods for Infants and Young Children (CODEX STAN 74-1981).
273	Singly or in combination: INS 410, 412, 414, 415 and 440 except for use at 20,000 mg/kg in gluten-free cereal based foods in products conforming to the Standard for Processed Cereal-Based Foods for Infants and Young Children (CODEX STAN 74-1981).
274	For use at 15,000 mg/kg in products conforming to the Standard for Processed Cereal-Based Foods for Infants and Young Children (CODEX STAN 74-1981).
275	For use at 1,500 mg/kg In products conforming to the Standard for Canned Baby Foods (CODEX STAN 73-1981).
276	Singly or in combination with other modified starches used as thickeners In products conforming to the Standard for Canned Baby Foods (CODEX STAN 73-1981).
277	Excluding virgin and cold pressed oils and products conforming to the standard for Olive Oils and Olive Pomace Oils (CODEX STAN 33-1981).
278	For use in whipped cream and cream packed under pressure only.
279	Except for products conforming to the standard for Edible Fungi and Fungus Products (CODEX STAN 38-1981).
280	For use in pickled radish only.
281	For use in fresh minced meat which contains other ingredients apart from comminuted meat only.
282	Only non-amidated pectins may be used in the Standard for Canned Baby Foods (CODEX STAN 73-1981).
283	For use in canned fruit-based baby foods conforming to the Standard for Canned Baby Foods (CODEX STAN 73-1981) only.
284	Singly or in combination: INS 1412, 1413, 1414 and 1440 in products conforming to the Standard for Infant Formula and Formulas for Special Medical Purposes Intended for Infants (CODEX STAN 72-1981).
285	Singly or in combination: INS 1412, 1413, 1414 and 1422 in products conforming to the Standard for Follow-Up Formula (CODEX STAN 156-1987).
286	For use in products conforming to the Standard for Luncheon Meat (CODEX STAN 89-1981) and the Standard for Cooked Cured Chopped Meat (CODEX STAN 98-1981).
287	Except for use in products conforming to the Standard for Corned Beef (CODEX STAN 88-1981) at 30 mg/kg as residual NO <sub>2</sub> ion.

Notes	Descriptors
288	For use in products conforming to the Standard for Cooked Cured Ham (CODEX STAN 96-1981) and Cooked Cured Pork Shoulder (CODEX STAN 97-1981).
289	For use of sodium dihydrogen phosphate (INS 339(i)), disodium hydrogen phosphate (INS 339(ii)), trisodium phosphate (INS 339(iii)), potassium dihydrogen phosphate (INS 340(i)), dipotassium hydrogen phosphate (INS 340(ii)), tripotassium phosphate (INS 340(iii)), calcium dihydrogen phosphate (INS 341(i)), calcium hydrogen phosphate (INS 341(ii)), tricalcium phosphate (INS 341(iii)), disodium diphosphate (INS 450(i)), trisodium diphosphate (INS 450(ii)), tetrasodium diphosphate (INS 450(iii)), tetrapotassium diphosphate (INS 450(v)), calcium dihydrogen diphosphate (INS 450(vii)), pentasodium triphosphate (INS 451(i)), pentapotassium triphosphate (INS 451(ii)), sodium polyphosphate (INS 452(i)), potassium polyphosphate (INS 452(ii)), sodium calcium polyphosphate (INS 452(iii)), calcium polyphosphate (INS 452(iv)), ammonium polyphosphate (INS 452(v)), and bone phosphate (INS 542) as humectants in products conforming to the Standard for Cooked Cured Ham (CODEX STAN 96-1981) and Cooked Cured Pork Shoulder (CODEX STAN 97-1981). The total amount of phosphates (naturally present and added) shall not exceed 3,520 mg/kg as phosphorus.
290	For use in products conforming to the Standard for Luncheon Meat (CODEX STAN 89-1981) and Cooked Cured Chopped Meat (CODEX STAN 98-1981) at 15 mg/kg to replace loss of colour in product with binders only.
291	Except for use of beta-apo-8'-carotenal (INS 160e) and beta-apo-8'-carotenoic acid, methyl or ethyl ester (INS 160f) at 35 mg/kg.
292	Except for use in hydrolyzed protein and/or amino acid-based formula at 25,000 mg/kg.
293	On the saponin basis.
294	Except for use in liquid products at 600 mg/kg as steviol equivalents.
295	For use in products conforming to the Standard for Canned Baby Foods (CODEX STAN 73-1981) only, as an acidity regulator.
296	Except for use in perilla in brine at 780 mg/kg.
297	The level in the ready-to-eat food shall not exceed 200 mg/kg on the anhydrous basis.
298	For use in provolone cheese only.
299	For use in non-standardized food; and in products conforming to the Standard for Quick Frozen Fish Sticks (Fish Fingers), Fish Portions and Fish Fillets - Breaded or in Batter (CODEX STAN 166-1989): the following phosphates for use as humectants at 2200 mg/kg as phosphorous, INS 339(i), 339(ii), 339(iii), 340(i), 340(ii), 340(iii), 341(i), 341(ii), 341(iii), 450(i), 450(ii), 450(iii), 450(v), 450(vii), 451(i), 451(ii), 452(i), 452(ii), 452(iii), 452(iv), 452(v), and 542; and the following

Notes	Descriptors
	phosphates for use as raising agents in bread and batter coatings only at 440 mg/kg as phosphorous, INS 339(i), 340(iii), 341(i), 341(ii), 341(iii), 450(i), 450(ii), 450(iii), 450(v), 450(vi), 450(vii), 450(ix), 452(i), 452(ii), 452(iii) and 452(iv).
<b>300</b>	For use in salted squid only.
<b>301</b>	Interim maximum level
<b>302</b>	For use of sodium dihydrogen phosphate (INS 339(i)), disodium hydrogen phosphate (INS 339(ii)), trisodium phosphate (INS 339(iii)), potassium dihydrogen phosphate (INS 340(i)), dipotassium hydrogen phosphate (INS 340(ii)), tripotassium phosphate (INS 340(iii)), calcium dihydrogen phosphate (341(i)), calcium hydrogen phosphate (INS 341(ii)), tricalcium phosphate (INS 341(iii)), disodium diphosphate (INS 450(i)), trisodium diphosphate (INS 450(ii)), tetrasodium diphosphate (INS 450(iii)), tetrapotassium diphosphate (INS 450(v)), calcium dihydrogen diphosphate (INS 450(vii)), pentasodium triphosphate (INS 451(i)), pentapotassium triphosphate (INS 451(ii)), sodium polyphosphate (INS 452(i)), potassium polyphosphate (INS 452(ii)), sodium calcium polyphosphate (INS 452(iii)), calcium polyphosphate (INS 452(iv)), ammonium polyphosphate (INS 452(v)), and bone phosphate (INS 542) as humectants in products conforming to the Standard for Luncheon Meat (CODEX STAN 89-1981) and Cooked Cured Chopped Meat (CODEX STAN 98-1981) at 1,320 mg/kg as phosphorous. The total amount of phosphates (naturally present and added) shall not exceed 3,520 mg/kg as phosphorous.
<b>303</b>	Excluding products (other than white chocolate) conforming to the Standard for Chocolate and Chocolate Products (CODEX STAN 87-1981).
<b>304</b>	For use in breaded or batter coatings in products conforming to the Standard for Quick Frozen Fish Sticks (Fish Fingers), Fish Portions and Fish Fillets - Breaded or in Batter (CODEX STAN 166-1989), singly or in combination: carotenoids (betacarotenes, synthetic (INS 160a(i)), beta-carotenes, Blakeslea trispora (INS 160a(iii)), carotenal, beta-apo-8' (INS 160e), and carotenoic acid, ethyl ester, betaapo-8'- (INS 160f) and beta-carotenes, vegetable (INS 160a(ii)).
<b>305</b>	Except for use in breading or batter coatings in products conforming to the Standard for Quick Frozen Fish Sticks (Fish Fingers), Fish Portions and Fish Fillets – Breaded or in Batter (CODEX STAN 166-1989) only at 25 mg/kg as norbixin.
<b>306</b>	Excluding products conforming to the Standard for Dried Shark Fins (CODEX STAN 189-1993), the Standard for Crackers from Marine and Freshwater Fish, Crustaceans and Molluscan Shellfish (CODEX STAN 222-2001), the Standard for Boiled Dried Salted Anchovies (CODEX STAN 236-2003), the Standard for Live Abalone and for Raw Fresh Chilled or Frozen Abalone for Direct Consumption or for Further Processing (CODEX STAN 312-2013), and the Standard for Fresh and Quick Frozen Raw Scallop Products (CODEX STAN 315-2014).

Notes	Descriptors
307	Excluding raw squid.
308	For use in raw mollusks only.
309	For use in breaded or battered foods applied to non-standardized foods only.
310	Except for use in products conforming to the Standard for Canned Shrimps or Prawns (CODEX STAN 37-1981) at 250 mg/kg.
311	For use in terrine only.
312	For use in tsukudani and surimi products only.
313	For use in products conforming to the Standard for Crackers from Marine and Freshwater Fish, Crustaceans and Molluscan Shellfish (CODEX STAN 222-2001).
314	For use in yeast extracts.
315	Singly or in combination: ascorbic acid (INS 300), sodium ascorbate (INS 301), calcium ascorbate (INS 302), and ascorbyl palmitate (INS 304).
316	Within the limit for sodium specified in the Codex Standard for Follow-up Formulae (CODEX STAN 156-1987): singly or in combination with other sodium containing additives.
317	As ascorbic acid.
318	In dry cereal only.
319	Within the limit for sodium listed in the Codex Standard for Canned Baby Food (CODEX STAN 73-1981) for foods corresponding to that standard : singly or in combination with other sodium containing additives.
320	Within the limit for sodium listed in the Codex Standard for Processed Cereal based Foods for Infants and Young Children (CODEX STAN 74-1981) for foods corresponding to that standard: singly or in combination with other sodium containing additives.
321	For use in powdered mixes only.
322	For use in products conforming to the Standard for Edible Fats and Oils not Covered by Individual Standards (CODEX STAN 19-1981) and the Standard for Named Animal Fats (CODEX STAN 211-1999).
323	For use as firming agent.
324	For use in aloe vera only.
325	For general use in surimi products.
326	For use in fresh meat, poultry and game products only.
327	For use in fish products cooked in soy sauce.
328	Singly or in combination with other thickeners.
329	Use level in milk and soy based products only.

Notes	Descriptors
330	Except for use in canned products.
331	For non-standardized foods: for use in minced fish, shrimps and prawns only.
332	For general use as a glazing agent.
333	Excluding products conforming to the Standard for Smoked Fish, Smoked-Flavoured Fish and Smoke-Dried Fish (CODEX STAN 311-2013).
334	For salted fish with a salt content of greater than or equal to 18 percent during processing.
335	For use in products containing vegetable protein only.
336	For use in Chinese plum juices only.
337	For use in products conforming to the Codex Standard for Bouillons and Consommés (CODEX STAN 117-1981) at 50 mg/kg.
338	For use in products conforming to the Codex Standard for Bouillons and Consommés (CODEX STAN 117-1981) singly or in combination: sorbic acid (INS 200), potassium sorbate (INS 202), calcium sorbate (INS 203), benzoic acid (INS 210), sodium benzoate (INS 211), potassium benzoate (INS 212), and calcium benzoate (INS 213) at 500 mg/kg as sorbic acid (INS 200-203) or as benzoic acid (INS 210-213).
339	Excluding use for canned bouillons and consommés.
340	Except for products not conforming to the Codex Standard for Bouillons and Consommés (CODEX STAN 117-1981) at 100 mg/kg.
341	For use in products conforming to the Codex Standard for Bouillons and Consommés (CODEX STAN 117-1981) singly or in combination: carotenes, beta-, vegetable (INS 160a(ii)), carotenal, beta-apo-8'- (INS 160e) and carotenoic acid, ethyl ester, beta-apo-8'- (INS 160f) at 50 mg/kg.
342	For use of chlorophylls, copper complexes (INS 141(i)) only in products conforming to the Codex Standard for Bouillons and Consommés (CODEX STAN 117-1981).
343	For use in products conforming to the Codex Standard for Bouillons and Consommés (CODEX STAN 117-1981): sodium dihydrogen phosphate (INS 339(i)), disodium hydrogen phosphate (INS 339(ii)), trisodium phosphate (INS 339(iii)), potassium dihydrogen phosphate (INS 340(i)), dipotassium hydrogen phosphate (INS 340(ii)), tripotassium phosphate (INS 340(iii)), disodium diphosphate (INS 450(i)), trisodium diphosphate (INS 450(ii)), tetrasodium diphosphate (INS 450(iii)), tetrapotassium diphosphate (INS 450(v)), pentasodium triphosphate (INS 451(i)), pentapotassium triphosphate (INS 451(ii)), sodium polyphosphate (INS 452(i)), and potassium polyphosphate (INS 452(ii)) as acidity regulators at 440 mg/kg as phosphorus; calcium dihydrogen phosphate (INS 341(i)), calcium hydrogen phosphate (INS 341(ii)), and tricalcium phosphate (INS 341(iii)) as anticaking agents at 800 mg/kg as phosphorus on the dry matter basis in dehydrated products only; and dicalcium diphosphate (INS 450(vi)) and calcium polyphosphate (INS 452(iv)) as emulsifiers, stabilizers, and thickeners at 1,320 mg/kg as phosphorus.

Notes	Descriptors
344	For use of riboflavin, synthetic (INS 101(i)) only in products conforming to the Codex Standard for Bouillons and Consommés (CODEX STAN 117-1981).
345	For use in products conforming to the Codex Standard for Bouillons and Consommés (CODEX STAN 117-1981): sucrose esters of fatty acids (INS 473), sucroglycerides (INS 474) singly or in combination at 2,000 mg/kg.
346	For use in products conforming to the Codex Standard for Bouillons and Consommés (CODEX STAN 117-1981), singly or in combination: d-alpha-tocopherol (INS 307a), tocopherol concentrate, mixed (INS 307b), and dl-alpha-tocopherol (INS 307c) at 50 mg/kg.
347	Excluding plain products.
348	Singly or in combination: Sucrose esters of fatty acids (INS 473), sucrose oligoesters, type I and type II (INS 473a) and sucroglycerides (INS 474).
349	For use at 7,000 mg/kg in bakery cream fillings only.
350	For use at 10,000 mg/kg in cream powder analogues only.
351	Only for use in products conforming to the Standard for Cream Cheese (CODEX STAN 275-1973).
352	Except for use at 6,000 mg/kg in products with > 20% fat content.
353	On dry basis.
354	For use at 2,000 mg/kg in flavoured products conforming to the Standard for Fermented Milks (CODEX STAN 243-2003) only.
355	For use at 10,000 mg/kg in flavoured products conforming to the Standard for Fermented Milks (CODEX STAN 243-2003) only.
356	Excluding virgin or cold pressed oils.
357	Except for use in refined olive oil, olive oil, refined olive-pomace oil and olive pomace oil at 200 mg/kg to restore natural tocopherol lost in production.
358	Except for use in fish oils at 6,000 mg/kg, singly or in combination.
359	Excluding dairy fat spreads with $\geq$ 70% milk fat content.
360	In dairy fat spreads limited to products with < 70% fat content or baking purposes only.
361	For use at 5,000 mg/kg as tartaric acid in products conforming to the Standard for Dairy Fat Spreads (CODEX STAN 253-2006).
362	Excluding plain products conforming to the Standard for Fermented Milks (CODEX STAN 243-2003).
363	For use at 50,000 mg/kg for emulsified oils used in the production of noodles or bakery products.
364	Singly or in combination.



Notes	Descriptors
365	On a casings basis.
366	10,000 mg/kg in imitation chocolate with >5% water content.
367	For use at 10,000 mg/kg in candy containing not less than 10% oil.
368	For use at 10,000 mg/kg in whipped decorations.
369	For use in granola-type breakfast cereals only.
370	For use in noodles, skin or crusts for spring rolls, wontons, and shou mai only.
371	For use at 10,000 mg/kg in boiled noodles only.
372	For use in rolls only.
373	For use in sausage only.
374	For use in cooked frozen meat products only.
375	Excluding products conforming to the Standard for Chocolate and Chocolate Products (CODEX STAN 87-1981) except for white chocolate, where ascorbyl palmitate (INS 304) may be used only as an antioxidant at 200 mg/kg calculated on a fat content basis.
376	For use in hydrolyzed protein and/or amino acid based infant formula only.
377	For products conforming to the Standard for Luncheon Meat (CODEX STAN 89-1981), Standard for Cooked Cured Chopped Meat (CODEX STAN 98-1981), and Standard for Corned Beef (CODEX STAN 88-1981) use is limited to ready-to-eat products which require refrigeration.
378	For use in liquid infant formula only.
379	For use in hydrolyzed protein and/or amino acid based liquid infant formula only.
380	Except for use in powdered infant formula at 7,500 mg/kg.
381	As consumed.
382	For use only in smoked fish and smoke-flavoured fish products conforming to the Standard for Smoked Fish, Smoked-flavoured fish, and Smoke-dried fish (CODEX STAN 311-2013).
383	For use in gelatin powder only.
384	On a gelatin powder basis.
358	As a humectant for wetting of fumaric acid (INS 297).
386	Except for use in the Standard for Pickled Cucumbers (Cucumber Pickles) (CODEX STAN 15-1981) at 500 mg/kg, singly or in combination with other emulsifiers.
387	Except for use at 20,000 mg/kg in powdered sugar for fine bakery wares.
388	Excluding bread prepared solely with wheat flour, water, yeast or leaven, and salt.
389	Except for use at 500 mg/kg in products containing nut paste
390	For use as an antioxidant for non-standardized food and for raw chilled shucked mollusks conforming to the Standard for Live and Raw Bivalve Molluscs (CODEX STAN 292-2008).

Notes	Descriptors
391	For non-standardized food and for minced fish flesh only in products conforming to the Standard for Quick Frozen Blocks of Fish Fillets, Minced Fish Flesh and Mixtures of Fillets and Minced Fish Flesh (CODEX STAN 165-1989).
392	For non-standardized food and for products conforming to the Standard for Live and Raw Bivalve Molluscs (CODEX STAN 292-2008): for use as an antioxidant for raw frozen molluscs.
393	For use on Quick Frozen Scallop Meat and Quick Frozen Roe-on Scallop Meat Processed with phosphates conforming to the Standard for Fresh and Quick Frozen Raw Scallop Products (CODEX STAN 315-2014) as follows: the following phosphates at 2200 mg/kg as phosphorus for use as acidity regulators: INS 338, 339(i,ii,iii), 340(i,ii,iii), 341(i,ii,iii), 342(i,ii), 343(i,ii,iii), 450(i,ii,iii,v,vi,vii,ix), 451(i,ii), 452(i,ii,iii,iv,v); the following for use as humectants: INS 339(i,ii,iii), 340(i,ii,iii), 341(i,ii,iii), 450(i,ii,iii,v,vii), 451(i,ii), INS 452(i,ii,iii,iv,v), and 542; the following for use as sequestrants: INS 338, 339(i,ii,iii), 340(i,ii,iii), 341(i), 450(i,ii,iii,v,vi,vii), 451(i,ii), 452(i,ii,iii,iv,v); and the following for use as stabilizers: INS 339(i,ii,iii), 340(i,ii,iii), 341(i,ii,iii), 342(i,ii), 343(i,ii,iii), 450(i), INS 450(ii), INS 450(iii,v,vi,vii,ix), 451(i,ii), 452(i,ii,iii,iv,v) and 542.
394	For use in non-standardized food; and in products conforming to the Standard for Quick Frozen Shrimps or Prawns (CODEX STAN 92-1981); Quick Frozen Lobsters (CODEX STAN 95-1981); Quick Frozen Blocks of Fish Fillet, Minced Fish Flesh and Mixtures of Fillets and Minced Fish Flesh (CODEX STAN 165-1989); and Quick Frozen Fish Fillets (CODEX STAN 190-1995) as humectants at 2200 mg/kg as phosphorous: INS 339(i), INS 339(ii), INS 339(iii), INS 340(i), INS 340(ii), INS 340(iii), INS 341(i), INS 341(ii), INS 450(iii), INS 450(v), INS 450(vii), INS 451(i), INS 451(ii), INS 452(i), INS 452(ii), INS 452(iii), INS 452(iv), INS 452(v), and INS 542.
395	For use in heat-treated products conforming to the Standard for Quick Frozen Shrimps and Prawns (CODEX STAN 92-1981).
396	For use in dried and/or salted fish only.
397	For use at 1,000 mg/kg in non-UHT and non-sterilised buttermilk.
398	For use in products conforming to the Standard for Fermented Milk (CODEX STAN 243- 2003) at 1,000 mg/kg.
399	For use in products conforming to the Standard for Fermented Milk (CODEX STAN 243- 2003) at 10,000 mg/kg.
400	For use in products conforming to the Standard for Fermented Milk (CODEX STAN 243- 2003) at 150 mg/kg.
401	For use in products conforming to the Standard for Fermented Milk (CODEX STAN 243- 2003) at 600 mg/kg.

Notes	Descriptors
402	For use in products conforming to the Standard for Fermented Milk (CODEX STAN 243- 2003) at 100 mg/kg.
403	Excluding fermented milks and drinks not heat-treated after fermentation.
404	For use in energy-reduced products or products with no added sugar conforming to the Standard for Fermented Milk (CODEX STAN 243-2003) at 400 mg/kg.
405	For use in energy-reduced products or products with no added sugar conforming to the Standard for Fermented Milk (CODEX STAN 243-2003) at 1,000 mg/kg.
406	For use in energy-reduced products or products with no added sugar conforming to the Standard for Fermented Milk (CODEX STAN 243-2003) at 100 mg/kg.
407	For use in non-flavoured vitamin and mineral fortified fluid milks only.
XS13	Excluding products conforming to the Standard for Preserved Tomatoes (CODEX STAN 13-1981).
XS36	Excluding products conforming to the Standard for Quick Frozen Finfish, Uneviscerated and Eviscerated (CODEX STAN 36-1981).
XS38	Excluding products conforming to the General Standard for Edible Fungi and Fungus Products (CODEX STAN 38-1981).
XS57	Excluding products conforming to the Standard for Processed Tomato Concentrates (CODEX STAN 57-1981).
XS66	Excluding products conforming to the Standard for Table Olives (CODEX STAN 66-1981).
XS86	Excluding products conforming to the Standard for Cocoa Butter (CODEX STAN 86-1981).
XS87	Excluding products conforming to the Standard for Chocolate and Chocolate Products (CODEX STAN 87-1981).
XS88	Excluding products conforming to the Standard for Corned Beef (CODEX STAN 88-1981).
XS89	Excluding products conforming to Standard for Luncheon Meat (CODEX STAN 89-1981).
XS92	Excluding products conforming to the Standard for Quick Frozen Shrimps and Prawns (CODEX STAN 92-1981).
XS95	Excluding products conforming to the Standard for Quick Frozen Lobsters (CODEX STAN 95-1981).
XS96	Excluding products conforming to the Standard for Cooked Cured Ham (CODEX STAN 96-1981).
XS97	Excluding products conforming to the Standard for Cooked Cured Pork Shoulder (CODEX STAN 97-1981).
XS98	Excluding products conforming to the Standard for Cooked Cured Chopped Meat (CODEX STAN 98-1981).

Notes	Descriptors
XS105	Excluding products conforming to the Standard for Cocoa Powders (Cocoas) and Dry Mixtures of Cocoa and Sugars (CODEX STAN 105-1981).
XS115	Excluding products conforming to the Standard for Pickled Cucumbers (Cucumber Pickles) (CODEX STAN 115-1981).
XS117	Excluding products conforming to the Codex Standard for Bouillons and Consommés (CODEX STAN 117-1981).
XS141	Excluding products conforming to the Standard for Cocoa (Cacao) Mass (Cocoa/chocolate liquor) and Cocoa Cake (CODEX STAN 141-1983).
XS145	Excluding products conforming to the Standard for Canned Chestnuts and Canned Chestnut Puree (CODEX STAN 145-1985).
XS165	Excluding products conforming to the Standard for Quick Frozen Blocks of Fish Fillet, Minced Fish Flesh and Mixtures of Fillets and Minced Fish Flesh (CODEX STAN 165-1989).
XS166	Excluding products conforming to the Standard for Quick Frozen Fish Sticks (Fish Fingers), Fish Portions and Fish Fillets – Breaded or in Batter (CODEX STAN 166-1989).
XS189	Excluding products conforming to the Standard for Dried Shark Fins (CODEX STAN 189-1993).
XS190	Excluding products conforming to the Standard for Quick Frozen Fish Fillets (CODEX STAN 190-1995).
XS191	Excluding products conforming to the Standard for Quick Frozen Raw Squid (CODEX STAN 191-1995).
XS208	Excluding products conforming to the Standard for Cheese in Brine (CODEX STAN 208-1999).
XS222	Excluding products conforming to the Standard for Crackers from Marine and Freshwater Fish, Crustaceans and Molluscan Shellfish (CODEX STAN 222-2001).
XS236	Excluding products conforming to the Standard for Boiled Dried Salted Anchovies (CODEX STAN 236-2003).
XS240	Excluding products conforming to the Standard for Aqueous Coconut Products (CODEX STAN 240-2003).
XS243	Excluding products conforming to the Standard for Fermented Milks (CODEX STAN 243-2003).
XS250	Excluding products conforming to the Standard for a Blend of Evaporated Skimmed Milk and Vegetable Fat (CODEX STAN 250-2006).
XS251	Excluding products conforming to the Standard for a Blend of Skimmed Milk and Vegetable Fat in Powdered Form (CODEX STAN 251-2006).

Notes	Descriptors
XS252	Excluding products conforming to the Standard for a Blend of Sweetened Condensed Skimmed Milk and Vegetable Fat (CODEX STAN 252-2006).
XS253	Excluding products conforming to the Standard for Dairy Fat Spreads (CODEX STAN 253-2006).
XS257R	Excluding products conforming to the Codex Regional Standard for Canned Humus with Tehena (CODEX STAN 257R-2007).
XS259R	Excluding products conforming to the Codex Regional Standard for Tehena (CODEX STAN 259R-2007).
XS260	Excluding products conforming to the Standard for Pickled Fruits and Vegetables (CODEX STAN 260-2007).
XS262	Excluding products conforming to the Standard for Mozzarella (CODEX STAN 262-2007).
XS292	Excluding products conforming to the Standard for Live and Raw Bivalve Molluscs (CODEX STAN 292-2008).
XS297	Excluding products conforming to the Standard for Certain Canned Vegetables (CODEX STAN 297-2009).
XS309R	Excluding products conforming to the Codex Regional Standard for Halawa Tehenia (CODEX STAN 309R-211).
XS311	Excluding products conforming to the Standard for Smoked Fish, Smoked-flavoured Fish and Smoke-dried Fish (CODEX STAN 311-2013).
XS312	Excluding products conforming to the Standard for Live Abalone and for Raw Fresh Chilled or Frozen Abalone for Direct Consumption or for Further Processing (CODEX STAN 312-2013).
XS314R	Excluding products conforming to the Standard for Date Paste (CODEX STAN 314R-2013).
XS315	Excluding products conforming to the Standard for Fresh and Quick Frozen Raw Scallop Products (CODEX STAN 315-2014).
TH1	Excluding products conforming to the Notification of the Ministry of Public Health (No. 351) B.E. 2556 Re: Flavoured milk
TH2	Excluding products conforming to the Notification of the Ministry of Public Health (No. 83) B.E. 2527 Re: Chocolate.
TH3	Excluding products conforming to the Notification of the Ministry of Public Health (No. 195) B.E. 2543 (2000) Re: Electrolyte Drinks.
TH4	Excluding products conforming to the Notification of the Ministry of Public Health (No. 354) B.E 2556 (2013) Re: Ice Cream.
TH5	Excluding products conforming to the Notification of the Ministry of Public Health (No. 353) B.E 2556 (2013) Re: Fermented Milk.

Notes	Descriptors
TH6	Excluding products conforming to the Notification of the Ministry of Public Health (No. 355) B.E. 2556 (2013) Title: Food in a Hermetically Sealed Container.
TH7	For bacon only.
TH8	For Thai style fermented products ( <i>Naem</i> ) only.
TH9	For ham only.
TH10	For Chinese sausage only.
TH11	For fermented Thai sausage ( <i>Sai-krok-Isan</i> ) only.
TH12	For sausage and similar products i.e. bolona sausage, northern Thai spicy sausage ( <i>Sai-Aua</i> ) only.
TH13	For Ice Cream only.
TH14	For flavoured drinking yoghurt only.
TH15	For flavoured yoghurt only.
TH16	For flavoured only.
TH17	For frozen products only.
TH18	For use at 600 mg/kg in fillings for cracker only.
TH 19	Excluding Thai rice noodle ( <i>Ka-Nom-Jeen</i> ). For bean vermicelli and rice vermicelli at 250 mg/kg (as residual SO <sub>2</sub> ).
TH 20	The combined use with nitrites is forbidden.
TH 21	The combined use with sorbates is forbidden.
TH 22	For canning products and frozen products only.
TH23	Excluding cola carbonated soft drink.
TH24	Excluding Thai rice noodle ( <i>Ka-Nom-Jeen</i> ).
TH25	Except for use in cakes at 10,000 mg/kg.
TH26	Except for use in mixes for cakes at 10,000 mg/kg.
TH27	For frozen surimi and frozen minced fish only.
TH28	Except for use in products in powder, liquid and concentrate forms at 150 mg/kg on the served to the consumer basis.
TH29	Except for use in flavoured yoghurt at 20 mg/kg.
TH30	For use in almond and coconut drinks, and ready-to-drink products with milk or cream or milk analogues or cream analogues only.